



**FINAL PROJECT - TI 141501**

**IMPROVEMENT OF INVENTORY CONTROL  
SYSTEMS FOR RAW MATERIAL IN A  
MAKE-TO-ORDER COMPANY**

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**APPROVAL SHEET**

**IMPROVEMENT OF INVENTORY CONTROL SYSTEMS  
FOR RAW MATERIAL IN A MAKE-TO-ORDER COMPANY**

**FINAL PROJECT**

Proposed as a Requisite to Graduate in Industrial Engineering Major and to  
Achieve a Bachelor Degree in Department of Industrial Engineering

Faculty of Industrial Technology  
Institut Teknologi Sepuluh Nopember

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**SURABAYA, JUNE 2015**



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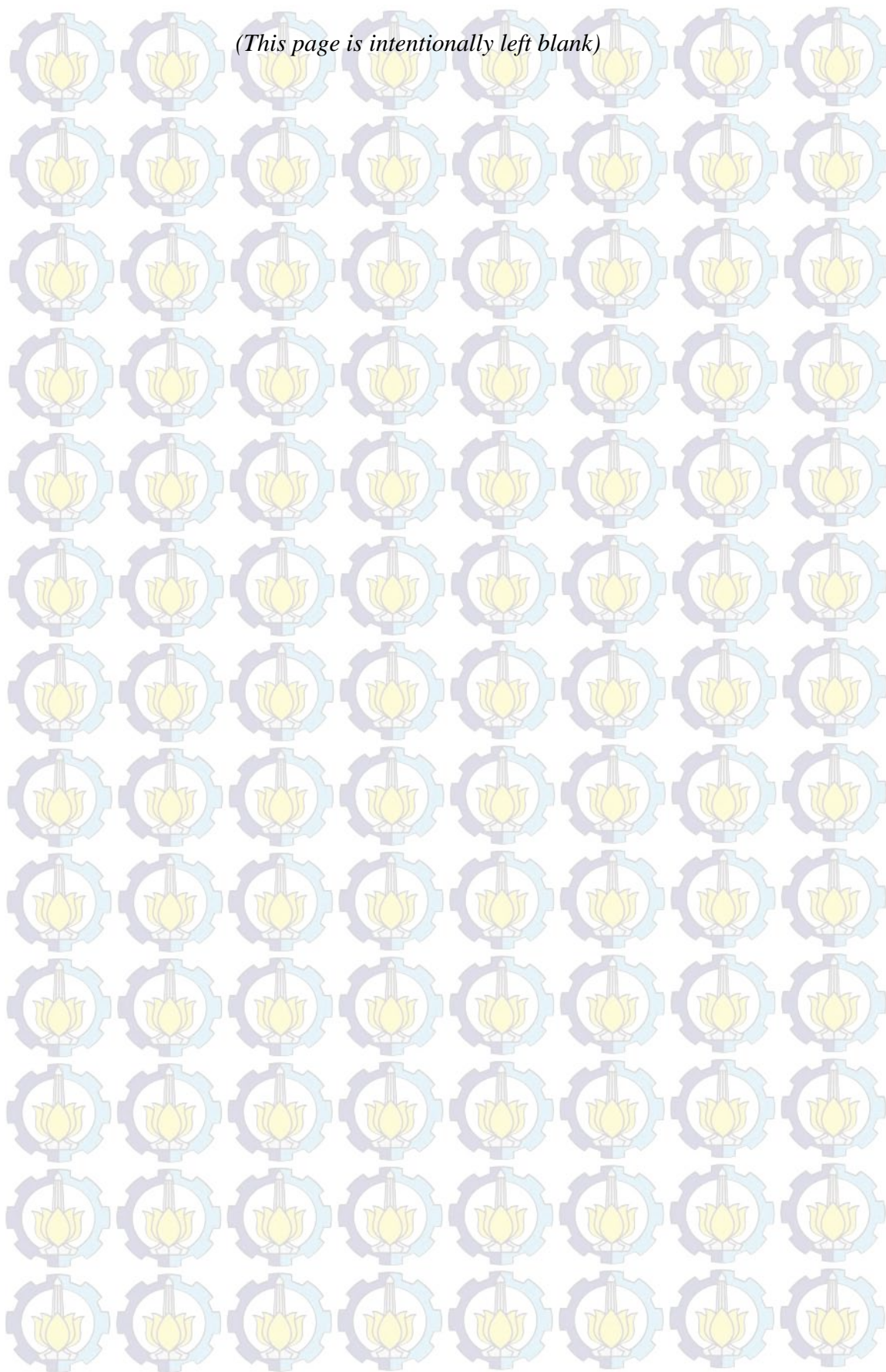
## ABSTRACT

In any manufacturing industry, inventory is always an important part to be controlled; companies have to design a system that is able to avoid stock outs while keeping the stock at minimum. Nonetheless, to some extents, managing inventory is utterly complicated. In many cases, companies turn into fiasco when they design an efficient inventory control system, especially for make-to-order companies which deal with extremely high demand uncertainty. In this paper, several inventory control systems such as continuous review (s, Q system) and periodic review (R, s, S system) are investigated and compared to the existing inventory control system in the company. The objective is to obtain a better inventory control system for every raw material category in terms of total cost and service level. At the very first phase, considering usage volume and the coefficient of variance, several raw material samples are taken. This research develops a Monte Carlo simulation for generating probabilistic demand and shipment lead time. In carrying out simulation for generating demand, author uses several replications to evade improper results, which could lead to wrong decisions. Each scenario for inventory control system is evaluated in terms of total cost and service level. Heuristic methods for both continuous and periodic inventory control systems are also used to test the sensitivity of the parameters. This paper brings an important recommendation to the company as well as insight for make-to-order companies in general. Since cost is the ultimate output for profit-based companies including Karya Makmur Baru, Ltd., the proposed inventory control system for each raw material category could be implemented by the company as a means to reduce the total inventory cost while maintaining the service level target. The inventory cost reduction ranges from 39.69% to 72.85%, with the minimum service level of 98.48%.

**Keywords:** Continuous Review, Heuristic Method, Inventory Control System, Make-to-order Company, Monte Carlo Simulation, Periodic Review



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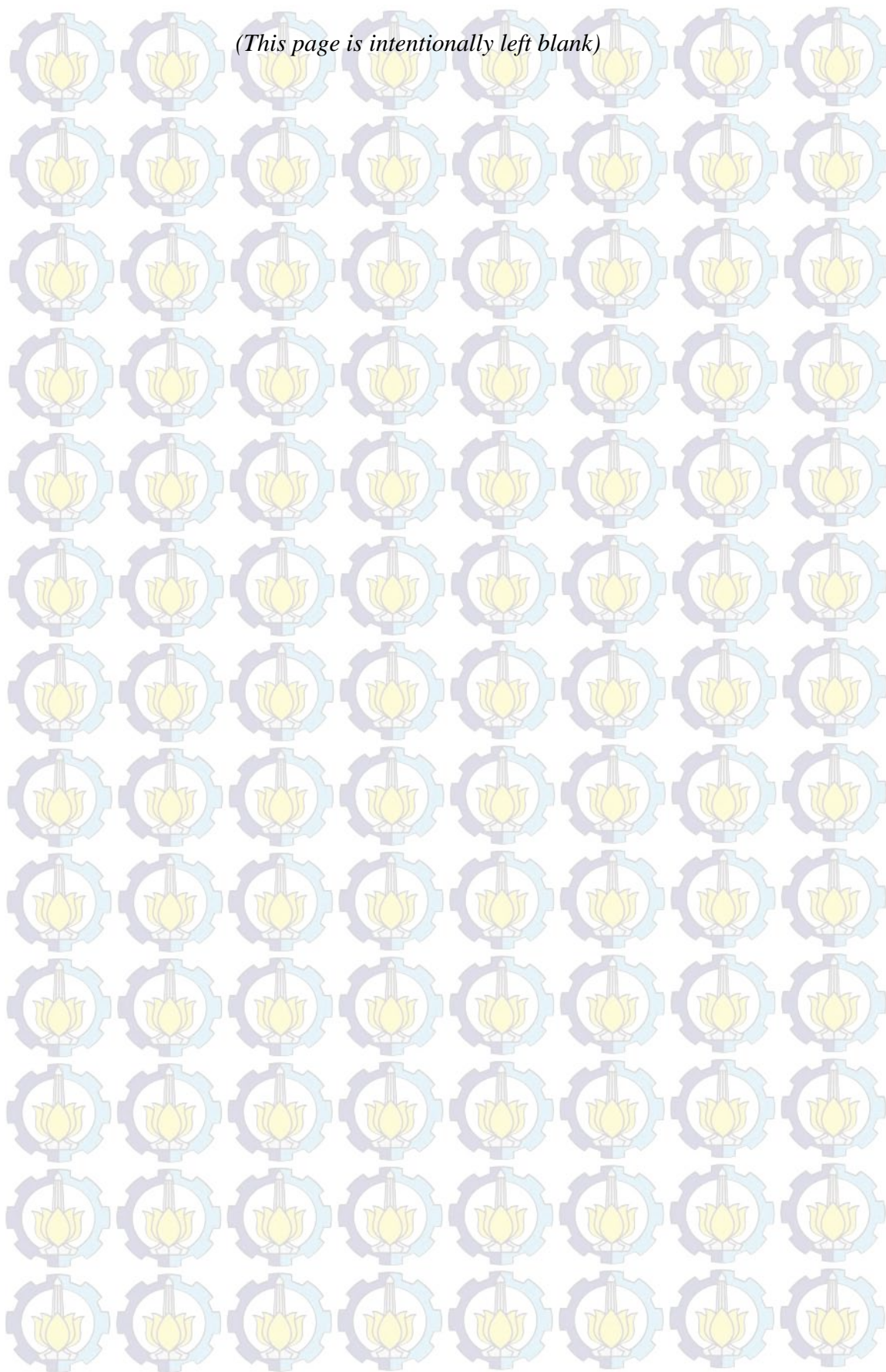
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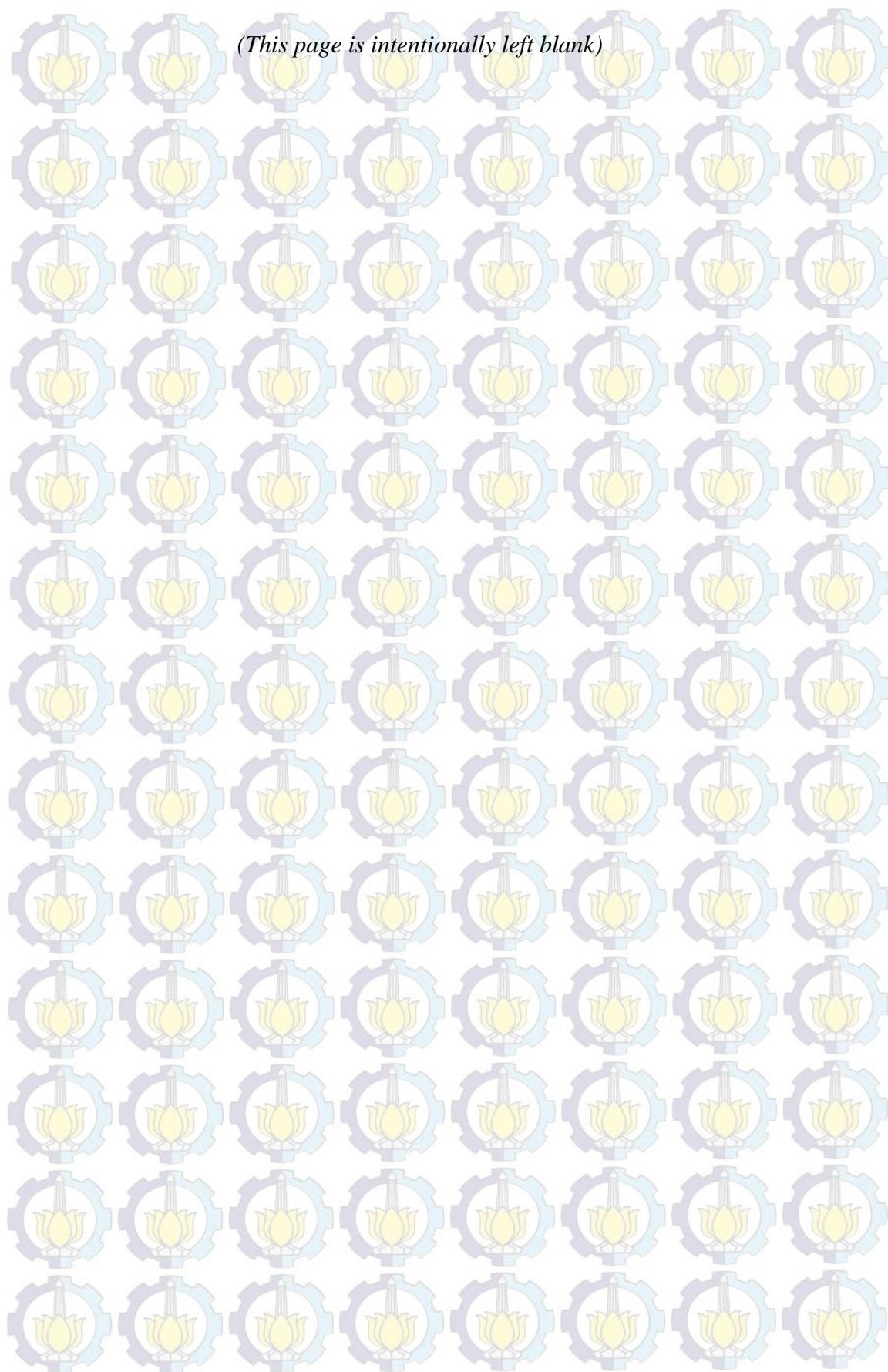
Last of all, author realizes that this research is far from perfect. Therefore, the author looks forward for positive suggestions and constructive critics from anyone. May this research contribute to academic world and provide improvements for better future.

Surabaya, Indonesia, 18 June 2015

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## AUTHOR'S BIOGRAPHY



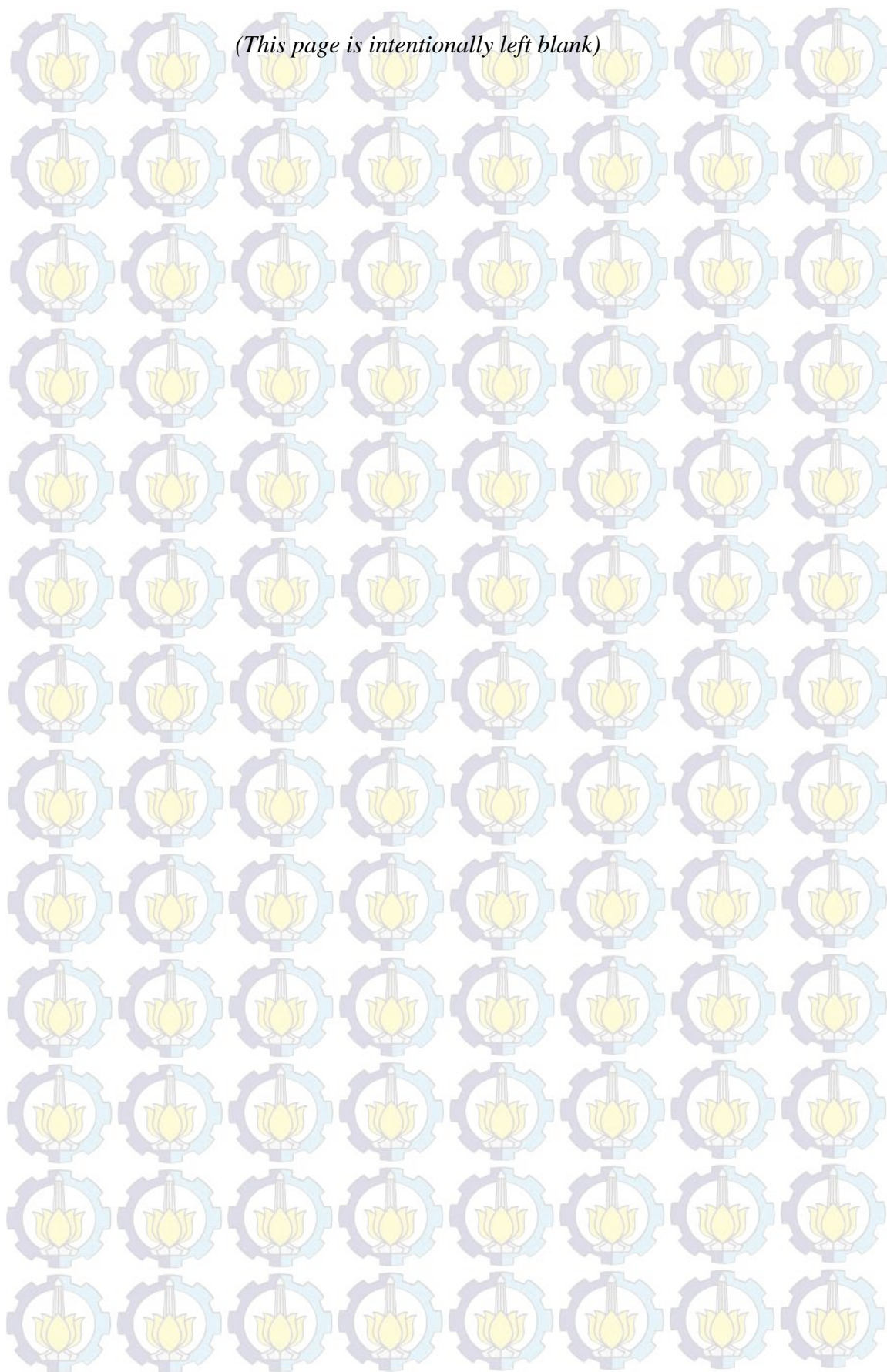
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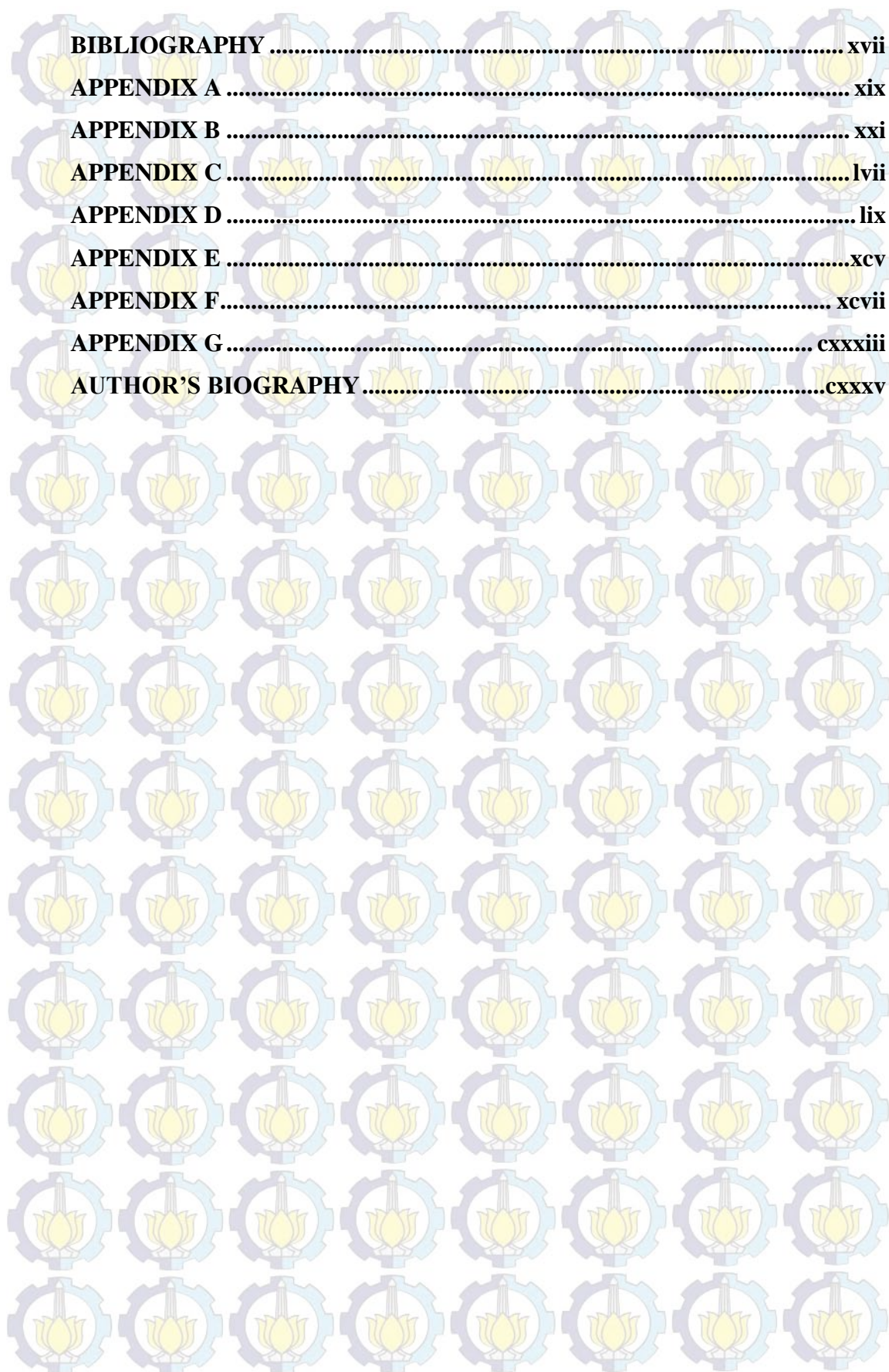
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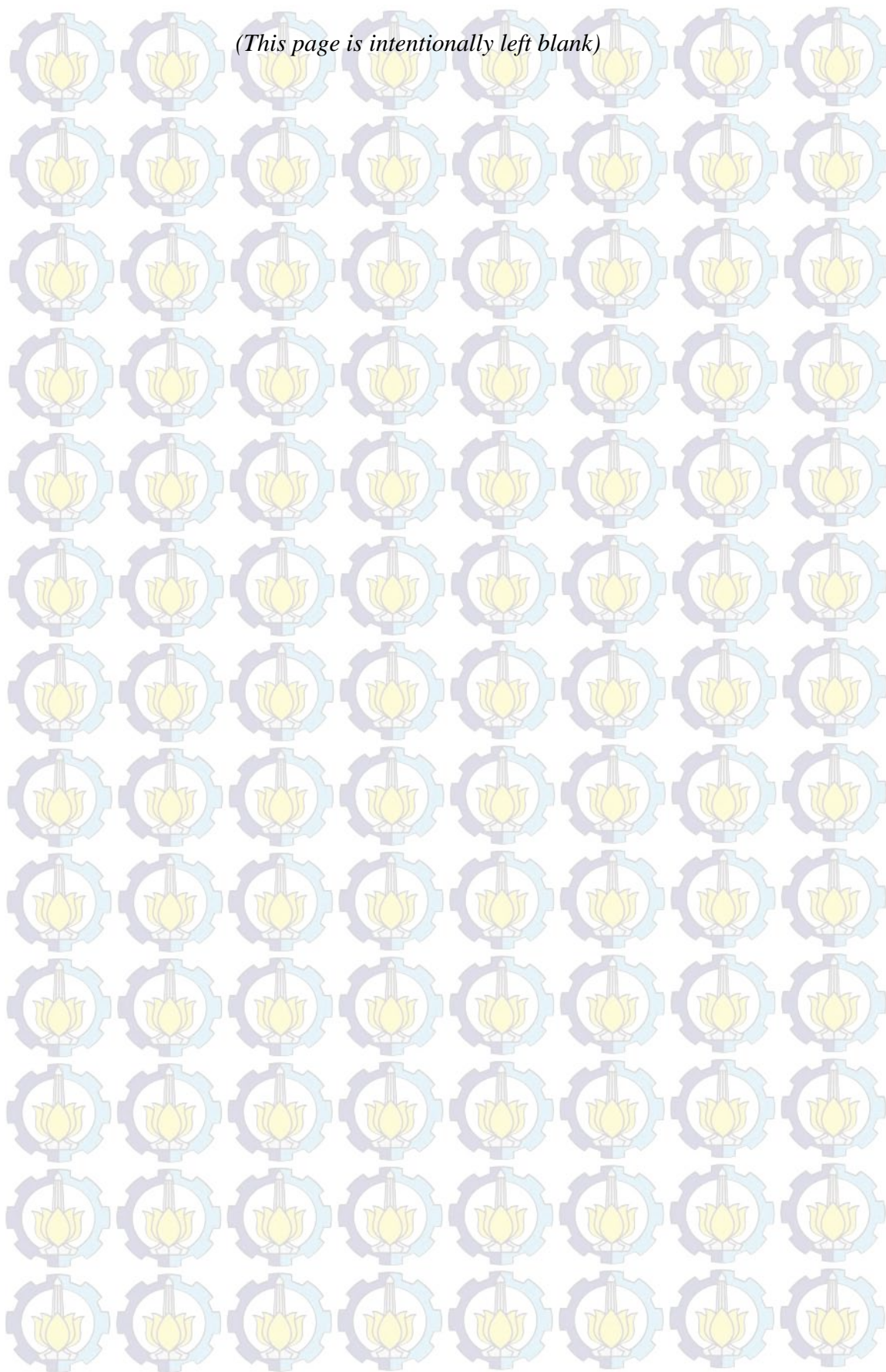


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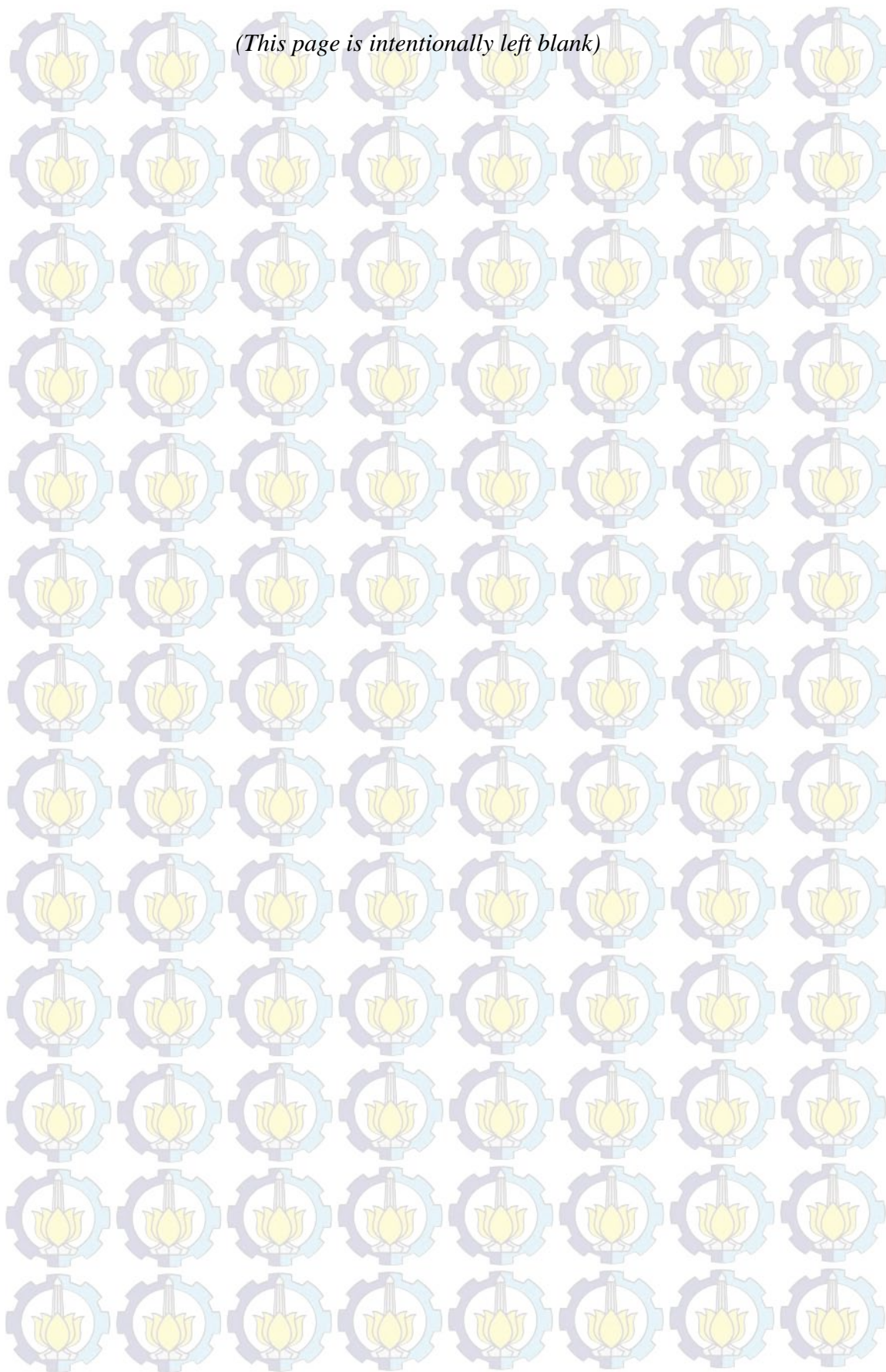
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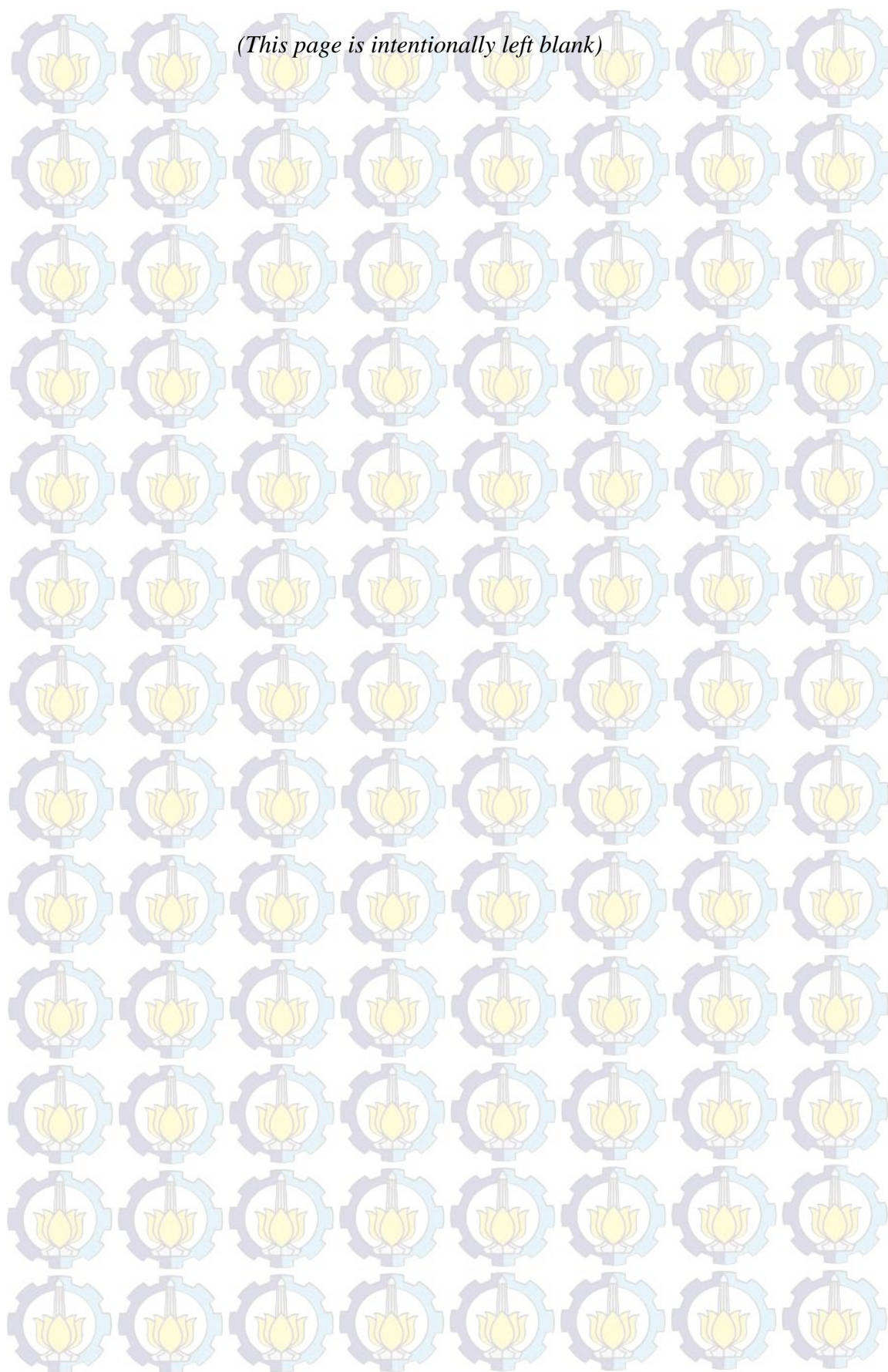


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# CHAPTER I INTRODUCTION

This chapter contains the background, problem formulation, objectives, benefits, and research scope. In the last part of this chapter, report outline of the research is explained.

## 1.1 Background

The issue of ASEAN Economic Community (AEC), which will start in December 2015, gives influential impacts to national economic condition. In spite of wide and numerous opportunities that could be enabled by AEC, in some extents, this could be a huge threat for companies in Indonesia. This issue allows countries in South East Asia to strive against each other without any barriers, including free taxes and product flows. Since there are no taxes applied, it is obvious that countries outside Indonesia would try to come and conquer national market. Domestic companies have to be aware of this and they should also strengthen and intensify their export activities.

On the authority of Indonesia National Statistics Bureau (2015), annual printing and paper craft export in Indonesia fluctuated with quite small deviation for more than a decade starting from 2002. From Figure 1.1, it could be seen that the trend, however, shows positive increase for the time period. Export quantity reached its all-time peak in 2010 with almost 4600 tons delivered to foreign countries, while only 300 tons less were exported in 2013.

Printing and paper craft company could be categorized either as make to stock (MTS) or make to order (MTO) business. MTS printing and paper craft companies deal with continuous production and distribution, while MTO companies deal with customer orders. Owing to the fact that demand uncertainty from customers is far more unforeseen, MTO businesses suffer worse in order to design its appropriate inventory control system. In addition, up to this time, there are very limited researches taking account of MTO businesses. On account of some considerations explained earlier, *Karya Makmur Baru Ltd.*, is chosen as the research object.



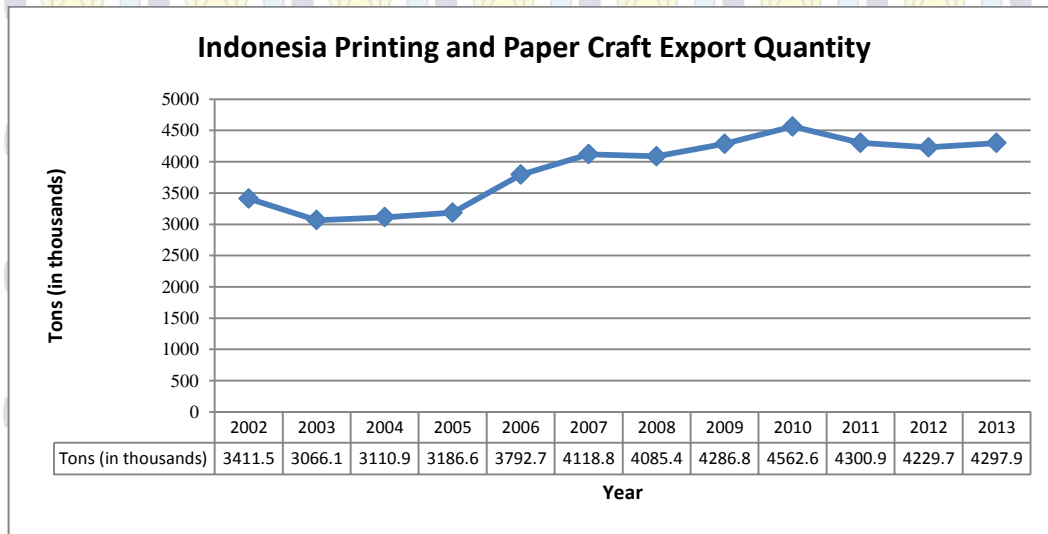


Figure 1. 1 Indonesia Printing and Paper Craft Export Quantity  
(Source: Indonesia National Statistics Bureau)

In general, there are three different kinds of inventory carried by a company in the warehouse i.e. raw materials and components, work in progress, as well as finished goods. Ballard (1996) defined raw materials and components as the products that are externally purchased and procured by the company; work in progress as products in which value have been added yet not completely manufactured; finished goods and as products which are ready to be delivered to fulfill demand. Nevertheless, in printing and paper craft MTO business, finished goods inventory would not influence much for the completed products will be directly delivered to customers.

According to a survey conducted by IOMA (2005), Figure 1.2 depicts the distribution of inventory-carrying costs value for all industries in various sectors. While many company simply have no idea about the exact carrying cost, majority allocate the carrying cost in between 10 percent to 14 percent of the value. With such distribution – and neglecting unidentified values – carrying cost has the average value of 12.3 percent.

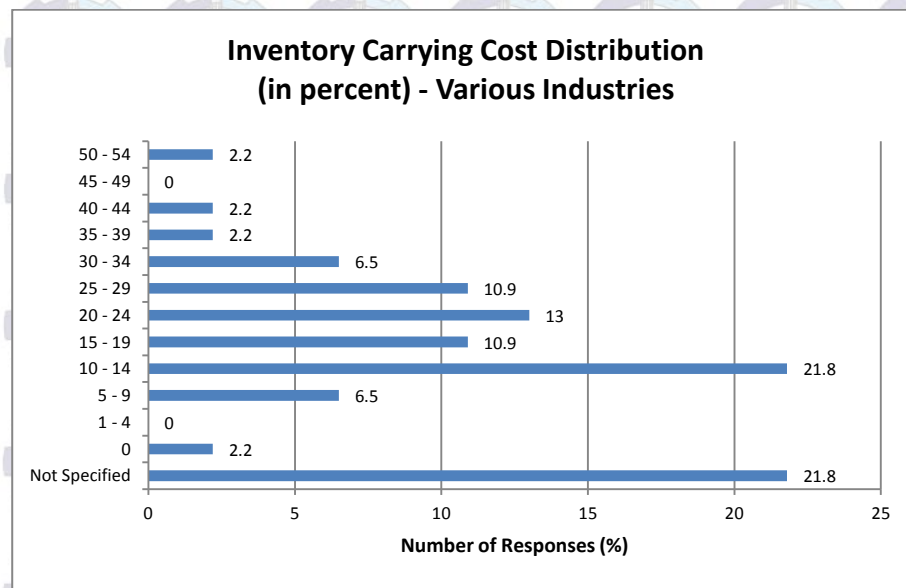


Figure 1. 2 Inventory Carrying Cost Distribution

(Source: "Inventory Carrying Cost: Critical Element in Purchasing Decisions, But Applied Sparingly," Supplier Selection & Management Report, (IOMA, New York, February, 2005.), p. 2)

Knowing the fact that carrying inventory in some sort is pricey; it is crucial for the company to optimize the inventory quantity in order to ensure sufficient inventory is available to fulfill anticipated demand at a certain service level through several strategies. The drawback found is to design a strategy that would minimize both inventory holding cost and backorder cost. Inventory holding cost occurs when the inventory amount surpasses the requirement, while backorder cost is found when inventory is unavailable and/or its amount could not fulfill the demand. For the company, backorder cost is obtained from multiplication of profit rate and average order value. *Karya Makmur Baru Ltd.* owns a profit rate of 20% and average order cost of Rp.7,781,508.00, resulting one stock out cost of Rp.1,556,301.60. An order will be lost once the raw material unavailability period exceed the agreed tolerance time from the customers.

Currently, *Karya Makmur Baru Ltd.* orders high usage raw material biweekly, normal usage raw material every month, every three months for low usage raw material, and/or whenever on hand inventory cannot accommodate the demand issued by customers. Besides, there is no such scientific calculation done to determine the order size; company orders approximately five times of average



demand to cope with order on hand, projected order on hand, and projected order. This strategy suffers the company for stocking too much raw materials in some specific time, while losing orders in the others.

In controlling inventory, there are two major strategies that could be implemented i.e. periodic and continuous review. As its name implies, periodic review designates a company to check inventory level once every specified time. In contrast, continuous review has no specific time period and replenishment is done once the stock level is less than reorder point (ROP). In this research, existing condition will be evaluated as well as compared to several inventory control strategy scenarios to assess which strategy suit the company the best. On top of that, the research also provides company with the total inventory cost reduction when recommended inventory control system is implemented.

## **1.2 Problem Formulation**

Based on the background that has been explained in the previous subchapter, this research is designed to evaluate existing inventory control system in *Karya Makmur Baru Ltd.*, as well as compare it with several other inventory control systems in order to come up with most efficient inventory control system for each raw material category. The chosen system should be able to diminish raw material stock out yet keep the overstock at minimum, resulting the least total inventory cost.

## **1.3 Objectives**

This research aims at several objectives, which are to:

1. Determine most efficient inventory control system for each raw material category.
2. Provide the company with the information of service level and inventory cost reduction by implementing recommended inventory control system.



#### **1.4 Benefits**

The benefits from this research are to:

1. Enrich the company owner with the knowledge and understanding in which inventory control is one activity that affects company's strategic business.
2. Minimize total inventory cost that is burdened to the company.

#### **1.5 Scope**

The scope of this research is defined by limitations and assumptions.

##### **1.5.1 Limitations**

Some limitations set for this research are:

1. There are three different inventory control systems studied for the company, which are existing inventory control system, continuous review with (s, Q system), and periodic review with minimum and maximum stock level (R, s, S system).
2. Inventory control system scenarios are only conducted for raw material inventory; work in process and finished goods inventory are neglected.

##### **1.5.2 Assumptions**

Some assumptions set for this research are:

1. Every order arrives in full quantity with zero defect.
2. Storage capacity is unlimited.
3. Demand in the projected year follow historical data demand's behaviour.
4. Raw material could not be added in the middle of production process.
5. There is no delivery from the previous year that is not yet arrived.

#### **1.6 Report Outline**

The following systematic framework will be used in structuring the content of this research:



## **CHAPTER I INTRODUCTION**

This chapter describes the background, problem formulation, objectives, benefits, and scope of this research. In the last part of this chapter, report outline of the research is explained.

## **CHAPTER II LITERATURE REVIEW**

This chapter explains theories and concepts based on existing literatures that have been developed and are used for the research. Some concepts and theories provided in the literature reviews are inventory, ABC analysis, Monte Carlo simulation, customer service level, as well as inventory control system.

## **CHAPTER III RESEARCH METHODOLOGY**

This chapter describes all phases conducted in this research so that the research could be done systematically. Generally, the research methodology contains observation and literature study, data collection, data processing, sensitivity analysis, data interpretation and analysis, and, lastly, conclusion and recommendation.

## **CHAPTER IV DATA COLLECTION AND PROCESSING**

This chapter includes all processes in order to prepare data to conduct the experiment. Those processes are data collection, data processing, as well as scenario generation and experiment.

## **CHAPTER V ANALYSIS AND INTERPRETATION**

This chapter includes analysis and interpretation of the results of all scenarios that conducted in the previous chapter. Several analyses regarding to raw material classification and the inventory control system decision for each sample will be carried out.

## **CHAPTER VI CONCLUSION AND RECCOMENDATION**

This chapter concludes the whole research and contains recommendations for further researches as well as for the company.



## CHAPTER II

### LITERATURE REVIEW

This chapter explains theories and concepts based on existing literatures that have been developed and are used for the research. Some concepts and theories provided in the literature reviews are inventory, ABC analysis, Monte Carlo simulation, customer service level, as well as inventory control system.

#### 2.1 Inventory

Inventory is defined as available material, or other tangible assets, stock on hand, which can be calculated and measured in a specific period of time (Tersine, 1994). Inventory control and management are common problems, which are faced by various organizations in economic sector. Generally, inventory exists in manufacturers, wholesalers, retailers, distributors, hospitals, and many others. Inventory exists due to uncertainty, location differences, and economical motives (Pujawan, 2010)

The main objective of inventory is to meet anticipated demand at a predetermined service level. Stock out and sudden production stop will likely to be imposed on companies with too small inventory level (Rahayu, 2014). As a further matter, Sequera and Andy (2013) have the same mind with Rahayu and add a belief that surplus inventory on hand is not desirable for a number of reasons, such as listed in Table 2.1.

Table 2. 1 The Cost of Surplus Inventory

|   |   |
|---|---|
| <b>Opportunity Cost/<br/>Financing Cost</b> | Surplus assets have zero value to the company until they are converted into cash in the course of operations. |
| <b>Poor Space<br/>Utilization</b>           | Surplus assets occupy space that could be used for productive, revenue-generating activity.                   |
| <b>Depreciation Expense</b>                 | Relative to other assets, surplus assets depreciate more rapidly in value as they become obsolete.            |
| <b>Tracking Expense</b>                     | The cost of resources allocated to track surplus assets could be better utilized in other activities.         |
| <b>Maintenance Costs</b>                    | While sitting idle, some surplus assets must be maintained to keep them in good operating condition.          |



Table 2.1 The Cost of Surplus Inventory (continued)

|                          |  |
|--------------------------|--|
| <b>Damage and Repair</b> | Surplus inventory is subject to damage in the warehouse resulting in potential repair costs and potential write-off.   |
| <b>Shrinkage</b>         | Surplus inventory is subject to loss and shrinkage.  |
| <b>Insurance Costs</b>   | Surplus assets must be insured against damage.   |
| <b>Higher Taxes</b>      | Surplus assets may increase the company's property tax.  |
| <b>Lower ROA</b>         | Surplus assets reduce a company's ROA (Return on Assets). A low ROA represents inefficiencies and impacts stock price. |

Source: (Sequera and Andy, 2013)

Tersine (1994) believes inventory has several key functions in fulfilling company's needs, including:

1. Minimize the risk of raw materials, or any other desired goods, delivery lateness which could disturb production process.
2. Minimize the risk of accepting low quality raw materials, or any other goods, which have been ordered.
3. Minimize the risk of inflation.
4. Minimize the risk of stock out that leads to lost sales.
5. Maintain customer's goodwill (opportunity cost).
6. Increase customer service level, since availability of product gets higher.
7. Can be allocated to stock seasonal raw material so that company will not suffer from raw material scarcity in market.

According to Ballou (2004), there are three main costs that influence the decision of inventory control system. Those costs are procurement cost, carrying cost, and stock out cost. Those costs are co-relational and Figure 2.1 exhibits the relationship between them.



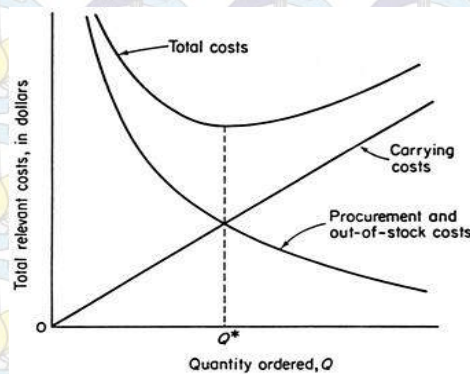


Figure 2. 1 Inventory Costs Trade-Off (Ballou, 2004)

#### a. Procurement Cost

When an order is placed, there are several relevant costs related to procurement costs, such as: setup order cost, delivery cost, and order cost. Transportation cost can be categorized inside or outside procurement cost, subject to each company. Costs included in procurement cost are mostly fixed and not sensitive to order size. However, such costs as material handling cost and transportation cost is not fixed because it depends of the order size.

#### b. Carrying Cost

There are four cost categories included in carrying cost, which are: space cost, capital cost, inventory service cost, and inventory risk cost. Each category is explained such as follows.

- Space Cost

When company uses outsource warehouse, space cost is measured based on materials weight and/or volume in certain period of time. In case the company solely owns the warehouse, space cost captures operational activity in the warehouse.

- Capital Cost

Capital cost occurs because of goods value. Even though the cost is intangible and very subjective compared to other carrying costs, capital cost is responsible for more than 80% of the total



inventory cost (Ballou, 2004). To some extent, capital cost is relatively difficult to be measured and several approaches (e.g. hurdle rate or average return on investment) are implemented to calculate this.

- **Inventory Service Cost**

Insurance and tax are covered in inventory service cost. Insurance is an attempt to protect goods in warehouse from combustion, natural disaster, and robbery. On the other hand, tax is little part of the total cost in which company is responsible to pay for.

- **Inventory Risk Cost**

Inventory risk cost is originated from depreciation value of the goods, including ceasing to function. Inventory risk cost value is estimated from expenditure burdened to company to rework the goods as a means to make them functioned and can be used for production process or sold to customers.

c. **Stock Out Cost**

Stock out cost can be distinguished into two different terminologies, which are lost sales and back order. Lost sales terminology used when customers cannot obtain their desired good in a point of time and they decided not to wait until when it is available. On the contrary, back order is a condition when customers do not mind to long for goods availability. In such case, sales is not lost but only postponed. As a result of it, several additional transportation cost and inventory cost might be found.

## **2.2 ABC Analysis**

Product classification is essential in multi-product inventory system (Nahmias, 2009). ABC classification, also known as ABC analysis, in fact, is an efficient and most widely employed technique for inventory classification in organizations. ABC analysis accounts for annual dollar usage for classification of



inventory items in one year. This analysis that is based on Pareto principal is an easy to understand method (Torabi, et. al, 2012).

ABC Analysis divides the inventory items into the three classes (Ballou, 1998). Those classes are defined as such.

1. A class (most important) is a class consists 20% of the total item number, which contribute to 80% of the total value.
2. B class (less important) is a class consists 30% of the total item number, which contribute to 15% of the total value.
3. C class (least important) is a class consists 50% of the total item number, which contribute only to 5% of the total value.

ABC analysis method is carried out following several steps, such as explained.

1. Determine annual usage value by multiplying unit price and annual usage unit.
2. Sort the items in descending order, starting from the item that has biggest usage percentage relative to total annual spending.
3. Calculate the relative cumulative annual spending.
4. Determine items that categorized in class A, class B, and class C, based on the specified bound.

### **2.3 Monte Carlo Simulation**

Monte Carlo simulation is defined as a kind of simulation that relies on repeated random sampling and statistical analysis to generate results. This method of simulation is much related to random experiments, experiments for which the specific result is not known in advance. Monte Carlo simulation is very helpful to methodically investigate the complete range of risk associated with each risky input variable (Raychaudhuri, 2008).

The following steps are commonly performed for the Monte Carlo simulation of a physical process.

1. Observing and recording variable inputs that are used for generating results.
2. Defining probability distribution of main variables.
3. Calculating the cumulative distribution for every variable.



4. Determining interval for each variable.
5. Generating random value for cumulative distribution probability to obtain variable value to be used in simulation.
6. Reiterating the simulation continuously.

## 2.4 Customer Service Level

Customer service level is the desired probability not to face stock outs in ordering cycle (Lee & Larry, 2004). In many cases, customer service level is one of key performance indexes to measure supply chain reliability. Based on the explanation of Yoo, et al. (2008), customer service level indicates the ability of company to fulfill demand from customers using on hand stock. The higher customer service level specified by a company, the more inventories needed to be stocked. Indeed, this lead to extortionate inventory cost.

Two common service level parameters used are service per order cycle and service per units demanded.

### 1. Service per Order Cycle

Service level which is calculated from service per order cycle frequency depicts the probability of stock out during lead time. This approach emphasizes on how often service per order cycle occurs. In another word, service per order cycle ( $SL_c$ ) is defined as the fraction of order cycle without stock out.

$$SL_c = 1 - \frac{\text{number of cycles with stockout}}{\text{total number of order cycle}} \quad (2.1)$$

$$SL_c = 1 - P(M > B)$$

Where  $P(M > B)$  is the probability of stock out during lead time.

### 2. Service per Units Demanded

Service level which is calculated from service per units demanded captures the number of stock outs during lead time. Service per units demanded ( $SL_u$ ) shows the satisfaction percentage of demand fulfillment.



$$SL_u = 1 - \frac{\text{number of stockout units}}{\text{total number of demand units}} \quad (2.2)$$

$$SL_u = 1 - P(M > B)$$

Where  $P(M > B)$  is the probability of stock out during lead time.

## 2.5 Inventory Control System

In inventory control system, it is essential to determine several fundamentals, such as: how often the inventory control has to be monitored, replenishment time, and order size (Silver & Peterson, 1998). There are two inventory control system are often used in practice, those are continuous review and periodic review.

### 2.5.1 Continuous Review (s, Q System)

As the name implies, continuous review system, also referred to perpetual system and fixed-order-quantity system, has an approach to continuously track and check inventory level. An order is placed following certain order lot size (Q) once the level is reached predetermined inventory reorder point (ROP); whenever the inventory on hand decreases to ROP, a new order is placed to replenish the stock of inventory (Russel and Taylor, 2000). In continuous review system, when demand and lead-time are not uncertain, safety stock is added as a hedge against stock out.

In this research, heuristic simulations for (s, Q) system are carried out in order to obtain optimum decision variables. Reorder point is annotated as s, while order lot size is annotated as Q.



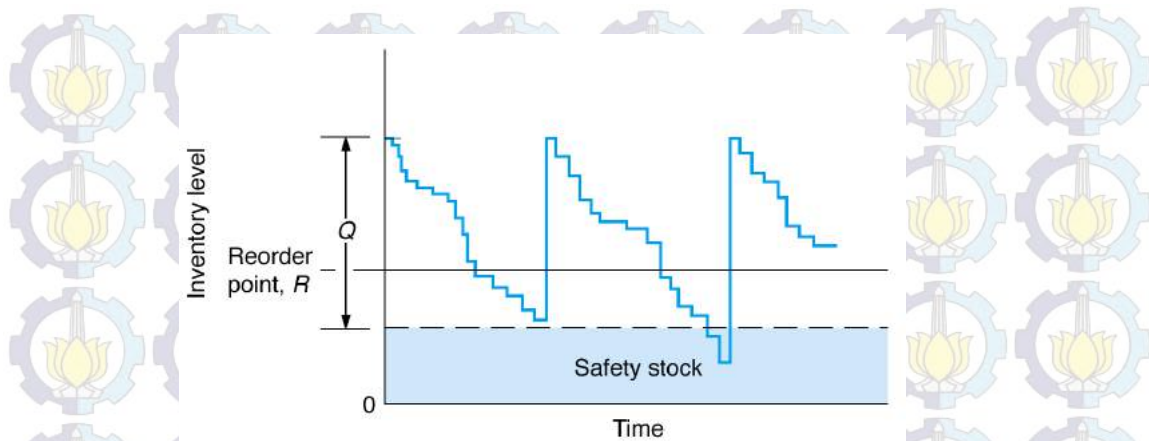


Figure 2. 2 Continuous Review Inventory Control Systems (Russel and Taylor, 2000)

Here are the inventory profiles in continuous review (Tersine, 1994):

$$Q^* = \sqrt{\frac{2\mu k}{h}} \quad (2.3)$$

$$SS = Z\sqrt{(\sigma_d)^2 L + (\sigma_L)^2 d^2} \quad (2.4)$$

$$D_L = d \cdot L \quad (2.5)$$

$$ROP = SS + D_L \quad (2.6)$$

Where,

$Q^*$  = optimum order size

$\mu$  = average annual demand

$k$  = order cost per lot

$h$  = holding cost per unit per year

$SS$  = safety stock

$Z$  = normsiv of service level

$\sigma_d$  = standard deviation of daily demand

$\sigma_L$  = standard deviation of lead time

$D_L$  = average demand during lead time

$d$  = average demand per period

$L$  = average lead time of replenishment

$ROP$  = reorder point

The advantage of continuous review is to address the situation where demand is high but the disadvantage is variable order quantity. The supplier can make mistakes more often and they would prefer the customers who ordered the fixed order quantity.

### 2.5.2 Periodic Review

Periodic review, also referred to as a fixed-time-period system, indicates that inventory status tracked at regular periodic intervals and reorder was made to raise the inventory level to the point of a predefined (Russel and Taylor, 2000). In other words, order size is flexible and placed every specified period of time.

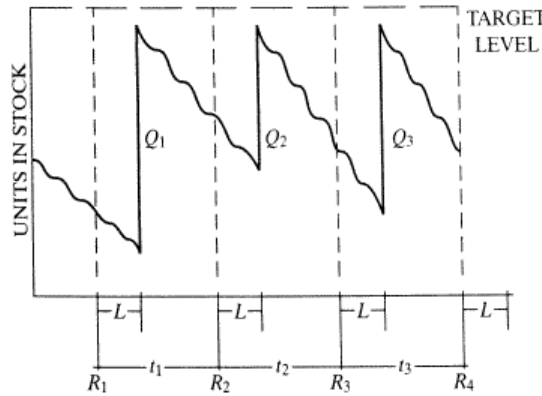


Figure 2. 3 Periodic Review Inventory Control Systems (Russel and Taylor, 2000)

Here are the inventory profiles in periodic review (Tersine, 1994):

$$T^* = \sqrt{\frac{2k}{h\mu}} \quad (2.7)$$

$$SS = Z\sqrt{(\sigma_d)^2(T + L) + (\sigma_L)^2d^2} \quad (2.8)$$

$$D_{T+L} = d(T + L) \quad (2.9)$$

$$OUL = SS + D_{T+L} \quad (2.10)$$

Where,

$T^*$  = optimum review interval

$D_{T+L}$  = average demand during  $T+L$

OUL = order up to level



In this system, the inventory level is not necessarily monitored at all time, so it leads to less or even no record keeping required. In contrast, the main drawback is limited direct control. This typically results in larger inventory levels for a periodic inventory system compared to continuous system to guard against unexpected stock outs early in the fixed period. Such a system also requires that a new order quantity be determined each time a periodic order is made.

#### **2.5.2.1 Order-up-to-Level (R, S) System**

Order-up-to-level system reviews inventory level with the interval of R period. In every review, replenishment is placed so that inventory level can be arose to Rahayu (2014) states that order-up-to-level system is only suitable for anticipating demand that follows normal or Poisson distribution.

#### **2.5.2.2 Combination between (s, S) and (R, S) System: (R, s, S) System**

In previous inventory control system, demand is assumed to follow normal or Poisson distribution. Since the demand in make-to-order companies does not show any trend or patterns (lumpy), order-up-to-level inventory control system is not appropriate.

In this research, (R, s, S) system, is chosen for periodic review inventory control system. Heuristic simulations are carried out as a means to find optimum decision variables. R is defined as review period interval, s is reorder point, and S is maximum level of inventory. In this system, once inventory level reach s point, order is placed to bring the inventory level to S. Conversely, when it has not reached s point, company does not replenish the inventory until the following review period R.

### **2.6 Previous Researches**

There have been several researches with inventory control system issue conducted. However, inventory control system for make to stock company has rarely been studied. In most cases, researches only focus on consumable products. Table 2.2 summarizes and compares previous researches conducted with this research.



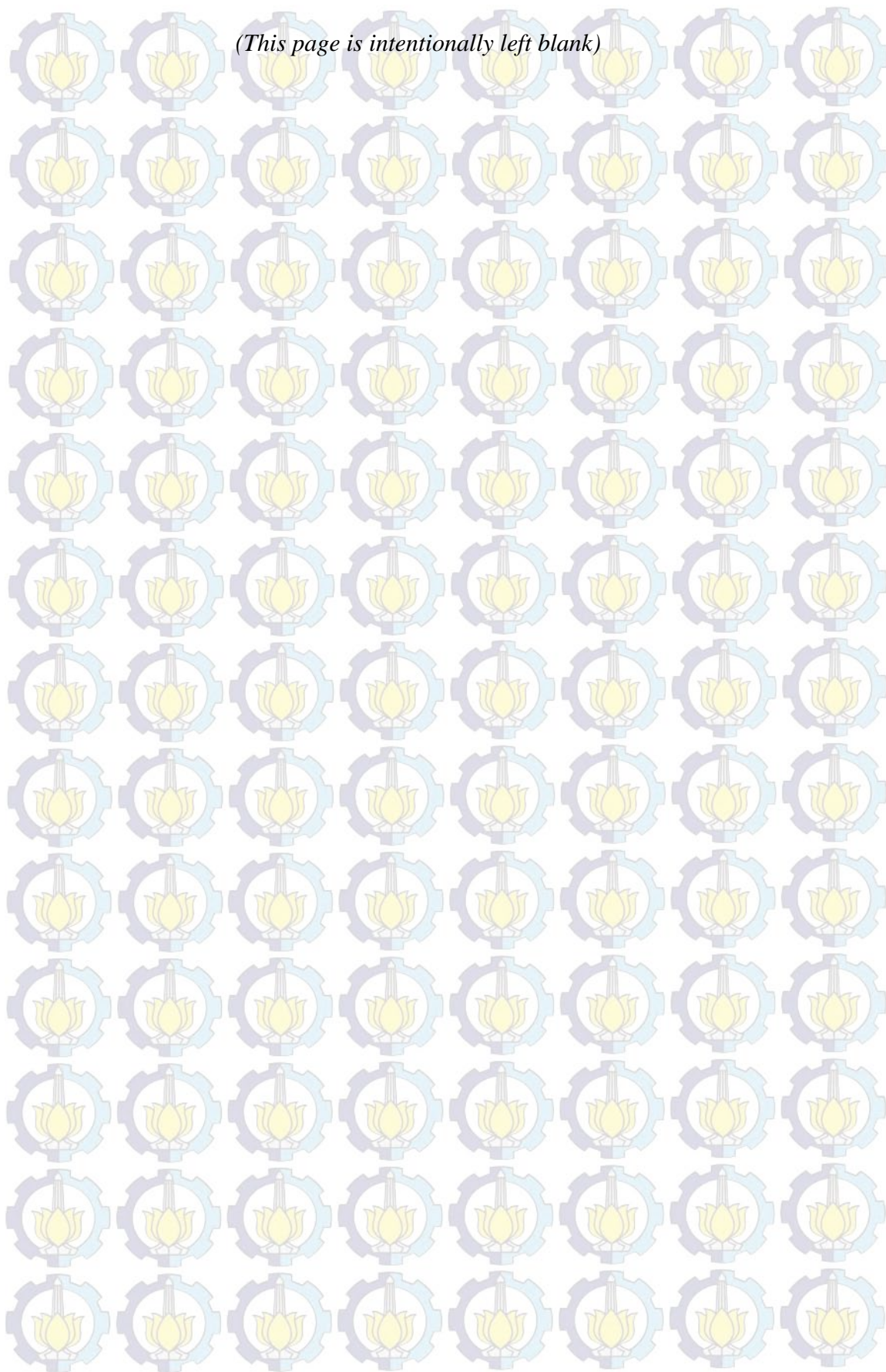
Table 2. 2 Comparison between Previous and Current Researches

| Parameter | Previous Research   |  |   | This Research  |
|-----------|---|--|---|--|
| Year      | 2009  | 2010   | 2014  | 2015   |
| Type      | Undergraduate Research  | Undergraduate Research   | Undergraduate Research  | Undergraduate Research   |
| Author    | Wirawan Aditya S. Penangsang  | A. A. Putri Damayanti  | Anik Puji Rahayu  | Robertus Willy Gunawan   |
| Title     | <i>Pengendalian Persediaan Spare Part dengan Pendekatan Periodic Review System (Studi Kasus PT. GMF Aero Asia, Unit Engine Maintenance)</i> | <i>Pengendalian Persediaan Spare Part Base Transceiver Station (BTS) dengan Pendekatan Base Stock (R, s, S) System</i> | <i>Pengendalian Persediaan Consumable Product dengan Menggunakan Simulasi Monte Carlo</i>   | Raw Material Inventory Control System Improvement for Make-to-Order Company in Karya Makmur Baru, Ltd.   |
| Object    | Spare Part  | Spare Part   | Consumable Product  | Raw Material   |
| Methods   | Periodic Review System, <i>Simulasi</i> Monte Carlo   | Base Stock (R, s, S) system  | ABC Analysis, Periodic Review System, Continuous Review System, Monte Carlo Simulation  | ABC Analysis, Periodic Review System, Continuous Review System, Monte Carlo Simulation   |
| Output    | Strategy for spare part unavailability  | Recommendation for BTS inventory management  | Consumable product critical commodity, inventory control system for consumable products, comparison between continuous and periodic review system | Inventory control system for each raw material category, comparison between continuous and periodic review system, total inventory cost, service level |

Source: (Penangsang, 2009), (Damayanti, 2010), (Rahayu, 2014)



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## CHAPTER III

### RESEARCH METHODOLOGY

This chapter describes all phases conducted in this research so that the research could be done systematically. Generally, the research methodology contains literature study, data collection, data processing, scenario generation and experiment, data analysis and interpretation, and, lastly, conclusion and recommendation.

The flowchart of this research methodology is given as follows.

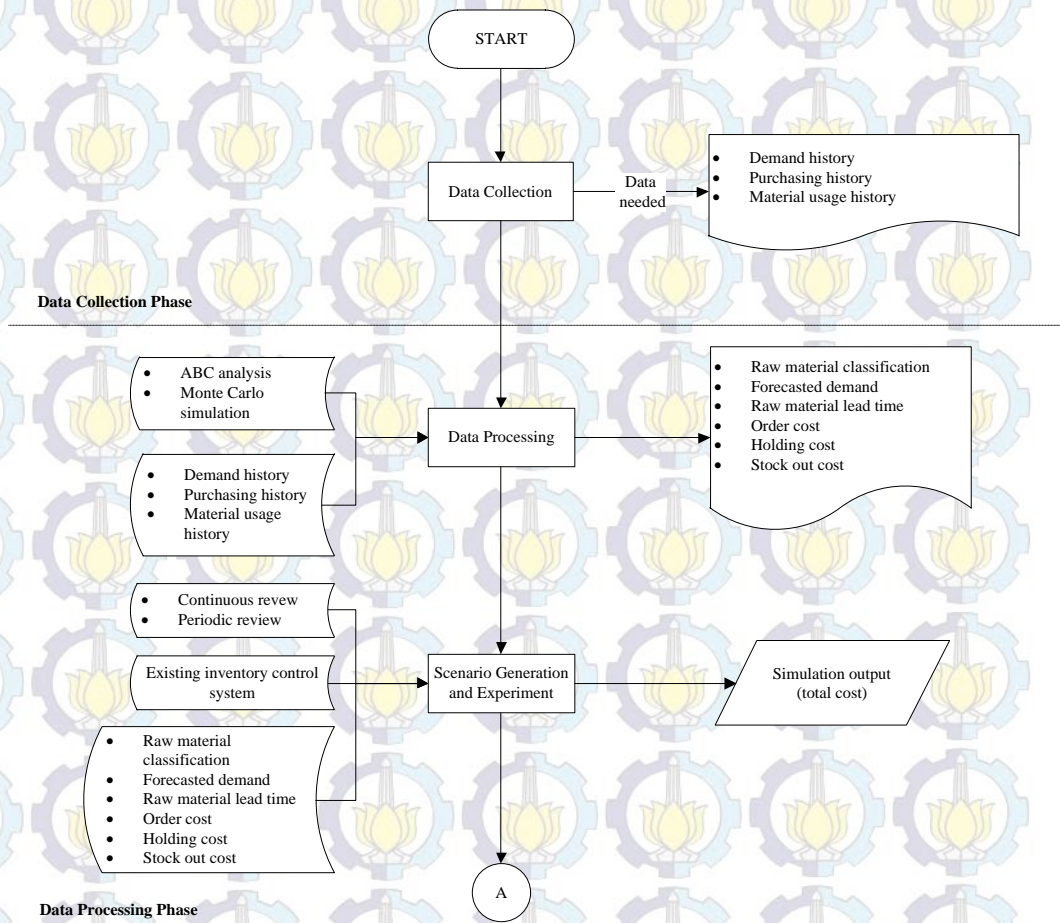


Figure 3.1 Flowchart of Research Methodology



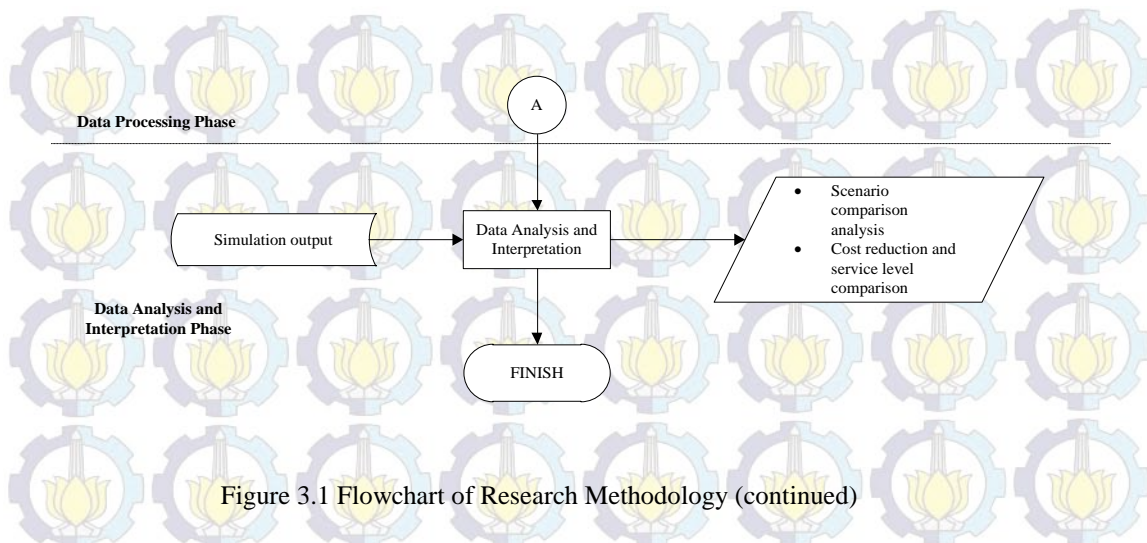


Figure 3.1 Flowchart of Research Methodology (continued)

### 3.1 Data Collection Phase

Data collection phase is carried out to obtain real data to capture existing system. All data are obtained from the company through direct observation and interview. In this research, historical data of demand, purchasing, as well as material usage are collected.

### 3.2 Data Processing Phase

Data processing phase deals with two major stages, which are data processing as well as scenario generation and experiment.

#### 3.2.1 Data Processing

At this stage, obtained data are processed to get some specified parameters, which could not be directly obtained from direct observation and/or interview, to picture the existing condition which then will be used to build scenarios and experiments. At the first place, raw materials in the company are categorized into three different categories following ABC classification rule. After it has been classified, one sample that has high coefficient of variance ( $CV$ ) and one that has low  $CV$  are taken from each category to be calculated in the inventory control system scenario.

Several data such as cost of order, holding, and stock out will also be calculated. Each cost is calculated with different approach. Order cost is determined from the administration overhead cost, and corresponding labor cost.



To determine holding cost, a certain rate will be specified to allow company to keep the materials. While stock out cost will be the average order value times the profit rate which is stated by the company.

Other data to process at this stage are forecast demand and lead time for every raw material, deemed from suppliers to the company. Forecast demand is able to be obtained from the historical data of demand. The forecasting is based on the Monte Carlo simulation since the demand does not follow any trend. As for the lead time, since it is stochastic, also, it will be processed based on the Monte Carlo simulation for the following year inventory control system scenarios.

### 3.2.2 Scenario Generation and Experiment

Subsequent to data processing, different inventory control system scenarios are then developed. Other than the existing inventory control system, there are other two different inventory control systems, which will be evaluated i.e. continuous review (s, Q system) inventory control and periodic review (R, s, S system) inventory control. These inventory control system scenarios will have the output of total inventory cost occurred in the time period of one year. Table 3.1 states inventory control system scenarios design for specified raw material samples.

Table 3. 1 Design of Scenarios

| Scenario | Description                              | Type               | Object                             |
|----------|--|--------------------|------------------------------------|
| Existing | Current Applied Inventory Control system | Exact Optimization | Chosen Samples from Classification |
| 1        | Continuous Review (s, Q System)          | Heuristic Method   |                                    |
| 2        | Periodic Review (R, s, S System)         | Heuristic Method   |                                    |

In the existing condition, *Karya Makmur Baru* Ltd. orders high usage raw material biweekly, normal usage raw material monthly, low usage raw material every three months, and/or whenever on hand inventory cannot accommodate the demand issued by customers. However, it is not yet optimum due to the absenteeism of any scientific calculation to determine the order size; company orders approximately five times of average demand. Scenarios help company to evaluate the existing inventory control system as well as to determine which



inventory control system cost the least for each raw material category.

### 3.3 Data Analysis and Interpretation Phase

This phase mainly compare four outputs that came from the simulation, which are existing inventory control system, continuous review ( $s, Q$ ) inventory control system, and periodic review ( $R, s, S$ ) inventory control system for several raw material samples. The comparison focuses on the total inventory cost occurred for each raw material in each category. At the end of this phase, the most efficient inventory control system for each raw material category is proposed and new service level as well as inventory cost reduction by implementing recommended inventory control system is deliberated.



## **CHAPTER IV**

### **DATA COLLECTION AND PROCESSING**

This chapter includes all processes in order to prepare data to conduct the experiment. Those processes are data collection, data processing, as well as scenario generation and experiment.

#### **4.1 Data Collection**

As previously mentioned, several data are collected to describe the existing performance of company's inventory control system and to obtain several input parameters in order to generate the scenarios. Several data to collect are demand history, purchasing history, and material usage history.

##### **4.1.1 Demand History**

Demand history will be able to project the demand in the following year. Therefore, historical data of demand are collected. The demand is recorded by the company staff once the order from customers occurs, with daily time basis.

##### **4.1.2 Purchasing History**

From the purchasing history, some information describing the existing system can be obtained. The first information is none other than each raw material unit price. Unit price will be useful to determine holding cost once this research has come to scenario generation. Besides, existing inventory control system, related to order size and review period, can also be understood.

##### **4.1.3 Material Usage History**

Since there is no lead time record in the previous year, indeed it has to be interfered. Lead time for each shipment from suppliers can be traced from the gap between ordering date (from the purchasing history) and inbound date (from the material usage history).



## 4.2 Data Processing

After all necessary data has been collected; the data are then processed to picture the existing condition which then will be used to build scenarios and experiments. From the data explained in the previous subchapter, raw material classification, inventory cost elements, verification and validation, as well as forecasted demand and lead time can be determined.

### 4.2.1 Raw Material Classification

Raw materials in the company are categorized into three different categories following ABC classification rule. This classification has a mean to help choosing the sample to be tested in further step. After it has been classified into three classes, one sample that has high coefficient of variance (CV) and one that has low CV are taken from each category to be calculated in the inventory control system scenario. The coefficient of variance for each material (CV) is given as follows.

$$CV = \frac{\sigma}{\mu} \quad (4.1)$$

Where,

$\sigma$  = daily standard deviation

$\mu$  = average daily usage

Table 4. 1 Raw Materials Classification

| Rank | Raw Material Name    | Percentage | Cumulative Percentage | Class | Categories   | CV    |
|------|----------------------|------------|-----------------------|-------|--------------|-------|
| 1    | DC 400 Gr 79 x 109   | 28.44%     | 28.44%                | A     | high usage   | 2.15  |
| 2    | DC 350 Gr 79 x 109   | 8.88%      | 37.32%                | A     | high usage   | 3.15  |
| 3    | DC 350 Gr 89 x 120   | 8.35%      | 45.67%                | A     | high usage   | 3.1   |
| 4    | AC 260 Gr 79 x 109   | 8.34%      | 54.01%                | A     | high usage   | 4.86  |
| 5    | DC 400 Gr 89 x 120   | 5.43%      | 59.44%                | A     | high usage   | 4.11  |
| 6    | DC 250 Gr 79 x 109   | 4.50%      | 63.94%                | A     | high usage   | 4.45  |
| 7    | DC 310 Gr 89 x 120   | 4.38%      | 68.32%                | A     | high usage   | 5.96  |
| 8    | DC 310 Gr 79 x 109   | 4.14%      | 72.46%                | A     | high usage   | 4.68  |
| 9    | AC 310 Gr 79 x109    | 2.98%      | 75.44%                | A     | high usage   | 2.66  |
| 10   | AC 260 Gr 65 x 100   | 2.86%      | 78.30%                | A     | high usage   | 11.61 |
| 11   | Matt 150 Gr 79 x 109 | 1.80%      | 80.10%                | B     | normal usage | 19.08 |

Table 4. 1 Raw Materials Classification (continued)

| Rank | Raw Material Name       | Percentage | Cumulative Percentage | Class | Categories   | CV    |
|------|-------------------------|------------|-----------------------|-------|--------------|-------|
| 12   | AP 150 Gr 79 x 109      | 1.74%      | 81.84%                | B     | normal usage | 11.23 |
| 13   | AC 360 Gr 79 x109       | 1.63%      | 83.47%                | B     | normal usage | 4.21  |
| 14   | AC 230 Gr 65x 100       | 1.60%      | 85.07%                | B     | normal usage | 7.72  |
| 15   | DC 250 Gr 89 x 120      | 1.56%      | 86.63%                | B     | normal usage | 7.67  |
| 16   | HVS 70 Gr 65 x 100      | 1.47%      | 88.10%                | B     | normal usage | 6.44  |
| 17   | AP 100 Gr 60 x 86       | 1.31%      | 89.41%                | B     | normal usage | 7.28  |
| 18   | Ivory 360 Gr 79 x 109   | 1.01%      | 90.42%                | B     | normal usage | 9.14  |
| 19   | AP 150 Gr 65 x 100      | 0.79%      | 91.22%                | C     | low usage    | 6.92  |
| 20   | AC 210 Gr 65 x 100      | 0.73%      | 91.95%                | C     | low usage    | 11.16 |
| 21   | Ivory 360 Gr 70/100     | 0.73%      | 92.68%                | C     | low usage    | 12.87 |
| 22   | DC 450 Gr 89 x 120      | 0.64%      | 93.32%                | C     | low usage    | 13.47 |
| 23   | AP 120 Gr 65 x 100      | 0.62%      | 93.94%                | C     | low usage    | 9.24  |
| 24   | Lenen 120 x 1600        | 0.60%      | 94.54%                | C     | low usage    | 18.59 |
| 25   | NCR Top White           | 0.46%      | 95.01%                | C     | low usage    | 13.38 |
| 26   | DC 500 Gr 79 x 109      | 0.41%      | 95.42%                | C     | low usage    | 13.47 |
| 27   | AP 100 Gr 65 x 100      | 0.38%      | 95.80%                | C     | low usage    | 13.32 |
| 28   | AC 230 Gr 79 x 109      | 0.37%      | 96.16%                | C     | low usage    | 7.31  |
| 29   | Bontak Sticker 54 x 70  | 0.36%      | 96.52%                | C     | low usage    | 5.84  |
| 30   | NCR Bottom Pink         | 0.33%      | 96.85%                | C     | low usage    | 19.08 |
| 31   | Ivory 350 Gr 79x109     | 0.30%      | 97.15%                | C     | low usage    | 11.23 |
| 32   | HVS Yellow 65 x 100     | 0.27%      | 97.42%                | C     | low usage    | 16.22 |
| 33   | Dorslag Green 44 x 69   | 0.25%      | 97.67%                | C     | low usage    | 18.1  |
| 34   | Ivory 400 Gr 78,8 x 109 | 0.19%      | 97.85%                | C     | low usage    | 19.08 |
| 35   | Ivory 390 Gr 79 x 109   | 0.18%      | 98.03%                | C     | low usage    | 19.08 |
| 36   | HVS 80 Gr 61 x 86       | 0.16%      | 98.20%                | C     | low usage    | 14.11 |
| 37   | Dorslag White 69x44     | 0.16%      | 98.35%                | C     | low usage    | 10.44 |
| 38   | NCR Middle Pink         | 0.15%      | 98.51%                | C     | low usage    | 13.63 |
| 39   | DC 400 Gr 70 x 100      | 0.15%      | 98.65%                | C     | low usage    | 10.98 |
| 40   | DC 450 Gr 79 x 109      | 0.14%      | 98.79%                | C     | low usage    | 11.04 |
| 41   | NCR Bottom Yellow       | 0.13%      | 98.92%                | C     | low usage    | 12.43 |
| 42   | HVS 80 Gr 65x100        | 0.13%      | 99.05%                | C     | low usage    | 15.95 |
| 43   | AP 120 Gr 79 x 109      | 0.13%      | 99.18%                | C     | low usage    | 17.07 |
| 44   | DC 400 Gr 82 x 112      | 0.09%      | 99.27%                | C     | low usage    | 15.12 |
| 45   | HVS 70 Gr 79 x 109      | 0.09%      | 99.36%                | C     | low usage    | 9.93  |
| 46   | HVS 70 Gr 61 x 86       | 0.08%      | 99.44%                | C     | low usage    | 15.85 |
| 47   | Sticker HVS 54 x 70     | 0.07%      | 99.51%                | C     | low usage    | 11.97 |
| 48   | Ivory 300 Gr 79 x 109   | 0.07%      | 99.58%                | C     | low usage    | 17.43 |
| 49   | AP 85 Gr 65 x 100       | 0.07%      | 99.64%                | C     | low usage    | 19.08 |
| 50   | HVS 100 Gr 65 x 100     | 0.06%      | 99.71%                | C     | low usage    | 17.45 |
| 51   | AC 310 Gr 65 x 100      | 0.06%      | 99.77%                | C     | low usage    | 19.08 |
| 52   | AC 400 Gr 79 x 109      | 0.06%      | 99.83%                | C     | low usage    | 16.02 |
| 53   | NCR Bottom Green        | 0.04%      | 99.86%                | C     | low usage    | 19.08 |
| 54   | YB KP No 40             | 0.03%      | 99.90%                | C     | low usage    | 19.08 |
| 55   | AP 190 gr 79 x 109      | 0.03%      | 99.93%                | C     | low usage    | 19.08 |
| 56   | Dorslag White 65/100    | 0.02%      | 99.94%                | C     | low usage    | 13.59 |
| 57   | Concorde T 79 x 109     | 0.01%      | 99.96%                | C     | low usage    | 13.47 |
| 58   | Dorslag Red 69 x 44     | 0.01%      | 99.97%                | C     | low usage    | 12.07 |
| 59   | NCR Middle Green        | 0.01%      | 99.97%                | C     | low usage    | 19.08 |
| 60   | Dorslag Yellow 69 x 44  | 0.01%      | 99.98%                | C     | low usage    | 14.2  |



Table 4. 1 Raw Materials Classification (continued)

| Rank | Raw Material Name     | Percentage | Cumulative Percentage | Class | Categories | CV    |
|------|-----------------------|------------|-----------------------|-------|------------|-------|
| 61   | Samson 90 x 120       | 0.01%      | 99.99%                | C     | low usage  | 13.48 |
| 62   | YPKP 30               | 0.00%      | 99.99%                | C     | low usage  | 19.08 |
| 63   | HVS 60 Gr 65 x 100    | 0.00%      | 99.99%                | C     | low usage  | 19.08 |
| 64   | BC White 65 x 100     | 0.00%      | 100.00%               | C     | low usage  | 19.08 |
| 65   | BC 150 Gr 65x100      | 0.00%      | 100.00%               | C     | low usage  | 19.08 |
| 66   | AP 100 Gr 79 x 109    | 0.00%      | 100.00%               | C     | low usage  | 19.08 |
| 67   | NCR Bottom Blue       | 0.00%      | 100.00%               | C     | low usage  | 19.08 |
| 68   | Symbol Matt 300 gr    | 0.00%      | 100.00%               | C     | low usage  | 19.08 |
| 69   | Ivory 260 Gr 79 x 109 | 0.00%      | 100.00%               | C     | dead       | -     |
| 70   | Ivory 230 Gr 79 x 109 | 0.00%      | 100.00%               | C     | dead       | -     |
| 71   | AC 360 Gr 65 x 100    | 0.00%      | 100.00%               | C     | dead       | -     |
| 72   | AC 210 Gr 79 x 109    | 0.00%      | 100.00%               | C     | dead       | -     |
| 73   | Matt 120 Gr 79 x 109  | 0.00%      | 100.00%               | C     | dead       | -     |
| 74   | AP 85 Gr 79 x109      | 0.00%      | 100.00%               | C     | dead       | -     |
| 75   | HVS 70 Gr 70 x 100    | 0.00%      | 100.00%               | C     | dead       | -     |
| 76   | Sticker Vinyl 53 x 86 | 0.00%      | 100.00%               | C     | dead       | -     |
| 77   | BC Blue 61 x 86       | 0.00%      | 100.00%               | C     | dead       | -     |
| 78   | KarKun No 50          | 0.00%      | 100.00%               | C     | dead       | -     |
| 79   | HVS 80 Gr 79x109      | 0.00%      | 100.00%               | C     | dead       | -     |
| 80   | DC 500 Gr 89.5x120    | 0.00%      | 100.00%               | C     | dead       | -     |
| 81   | BC Yellow 61 x 86     | 0.00%      | 100.00%               | C     | dead       | -     |
| 82   | BC 260 Gr 79 x 109    | 0.00%      | 100.00%               | C     | dead       | -     |
| 83   | Dorslag Blue 69 x 44  | 0.00%      | 100.00%               | C     | dead       | -     |
| 84   | HVS Red 65 x 100      | 0.00%      | 100.00%               | C     | dead       | -     |
| 85   | HVS 100 GR 79 x 109   | 0.00%      | 100.00%               | C     | dead       | -     |

From Table 4.1, which shows the recapitulation of raw materials classification in the company, several samples are taken to be tested in the scenarios. For C class, samples are not taken from the dead category since dead items are no longer used by the company. Chosen samples are AC 260 Gr 79 x 109, DC 400 Gr 79 x 109, DC 250 Gr 89 x 120, AC 360 Gr 79 x109, AC 230 Gr 79 x 109, and Bontak Sticker 54 x 70. These samples will be used for further calculation and comparison in different scenarios.

#### 4.2.2 Cost Calculation

After choosing the samples among raw materials in the company, other important data are the inventory cost elements, including order cost, holding cost, and stock out cost. These cost values are used to be one of the parameters in the scenarios. Detail for each cost component is described as follows.

#### 4.2.2.1 Order Cost

Order cost refers to payment that the company has to pay once an order is placed. Order cost is calculated from total usage of electricity, telephone, equipment and utilities, as well as the wage of labors dealing with procuring raw materials from suppliers, divided by the total number of order placed.

In order to avoid overestimating the value of order cost, not all electricity cost is considered into the calculation; yet, only electricity that is used for administrative activities are deliberated. While for the manpower cost, there is an employee who is fully in charge in purchasing and procurement activities, while the other one helps once needed. Thus, labor cost has the value of one and a half of the labor wage.

By taking all those cost elements into account, regardless of the order size, order cost for the company is Rp 131,774.28 per replenishment. The detail of the cost components and order cost calculation are given in Appendix A.

#### 4.2.2.2 Holding Cost

Holding cost ensues to keep the raw materials in the warehouse for a certain period of time. Using the rate of 12.3% from the unit price, the mathematical expression of daily holding cost ( $dh$ ) per unit is as follows:

$$dh = \frac{12.3\% \cdot \text{unit price}}{365} \quad (4.2)$$

Using Equation 4.2, holding cost for each sample are calculated and recapitulated in Table 4.2.

Table 4. 2 Daily Holding Cost per Unit for Each Sample

| No | Raw Material Name      | Unit | Daily Holding Cost per Unit |
|----|------------------------|------|-----------------------------|
| 1  | AC 260 Gr 79 x 109     | Ream | Rp 776.07                   |
| 2  | DC 400 Gr 79 x 109     | Ream | Rp 411.97                   |
| 3  | DC 250 Gr 89 x 120     | Ream | Rp 344.96                   |
| 4  | AC 360 Gr 79 x109      | Ream | Rp 704.98                   |
| 5  | AC 230 Gr 79 x 109     | Ream | Rp 473.80                   |
| 6  | Bontak Sticker 54 x 70 | Ream | Rp 340.36                   |



#### 4.2.2.3 Stock out Cost

Stock out cost occurs when customers cannot get their desired and they decided not to wait until when it is available. Stock out cost is actually not a cost that has to be burdened to the company; this cost is an opportunity cost, which means that the company could have obtained a certain value of profit if only stock out is not occurred.

For the company, stock out cost is calculated from the average order value, multiplied by the company profit rate. According to labor in financial department in the company, profit rate of the company is 20% while the average order value is Rp 7,781,508.00. Hence, stock out cost of the company is Rp 1,556,301.60 per order lost, regardless of the number ordered by customers.

#### 4.2.3 Generate Demand

From the historical data, daily demand for the following year is generated. Using Monte Carlo simulation, generate data is only done for six different raw materials that have been chosen as the sample for the company, which are AC 260 Gr 79 x 109, DC 400 Gr 79 x 109, DC 250 Gr 89 x 120, AC 360 Gr 79 x 109, AC 230 Gr 79 x 109, and Bontak Sticker 54 x 70. Several steps to perform Monte Carlo simulation has been stated in sub chapter 2.3, in which started with defining probability distribution of the main variable. Figure 4.1 and 4.2 shows histogram and time series plot of AC 260 Gr 79 x 109, respectively.

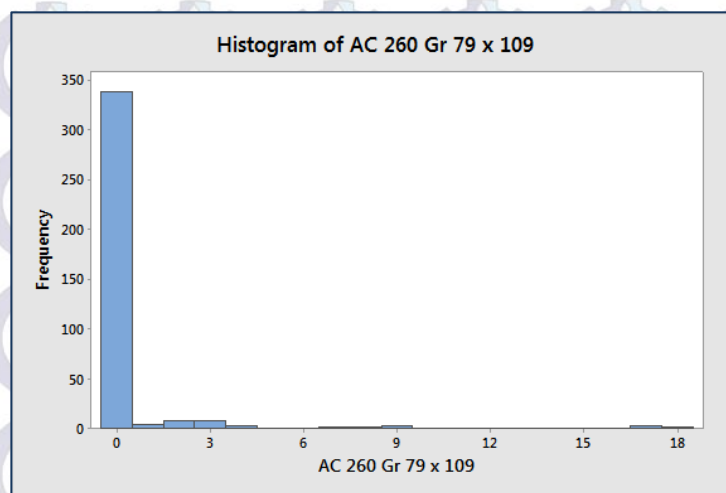


Figure 4. 1 Histogram of AC 260 Gr 79 x 109 Demand

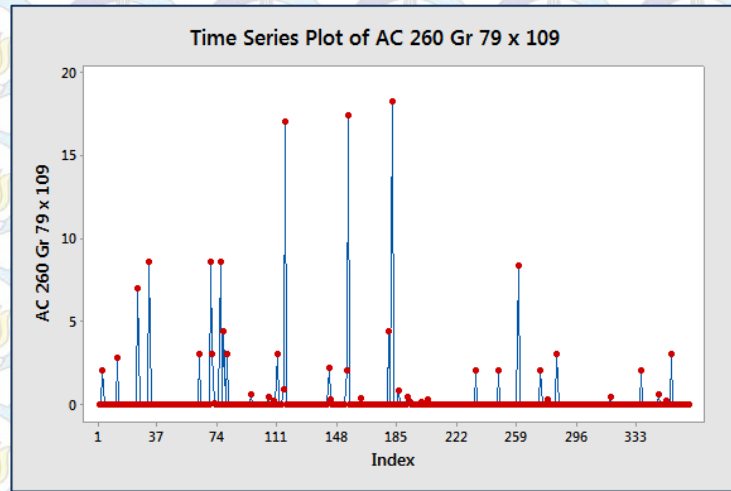


Figure 4. 2 Time Series Plot of AC 260 Gr 79 x 109 Demand

Since raw material demand for this company is a continuous value, demand data will be grouped in a certain range before it is recapitulated in the probability distribution. Table 4.3 displays the probability distribution of AC 260 Gr 79 x 109.

Table 4. 3 Probability Distribution of AC 260 Gr 79 x 109

| Interval         | Frequency | Probability | Lower Limit | Upper Limit |
|------------------|-----------|-------------|-------------|-------------|
| 0                | 325       | 0.8904      | 0           | 0.8904      |
| $0 < x \leq 2$   | 22        | 0.0603      | 0.8905      | 0.9508      |
| $2 < x \leq 4$   | 8         | 0.0219      | 0.9509      | 0.9728      |
| $4 < x \leq 6$   | 2         | 0.0055      | 0.9729      | 0.9784      |
| $6 < x \leq 8$   | 1         | 0.0027      | 0.9785      | 0.9812      |
| $8 < x \leq 10$  | 4         | 0.0110      | 0.9813      | 0.9923      |
| $10 < x \leq 12$ | 0         | 0.0000      | 0.9924      | 0.9924      |
| $12 < x \leq 14$ | 0         | 0.0000      | 0.9925      | 0.9925      |
| $14 < x \leq 16$ | 0         | 0.0000      | 0.9926      | 0.9926      |
| $16 < x \leq 18$ | 2         | 0.0055      | 0.9927      | 0.9982      |
| $18 < x \leq 20$ | 1         | 0.0027      | 0.9983      | 1           |

Using the probability distribution table, random value is generated to obtain daily demand one year ahead. Random value is generated twice, one for determining in which interval the value belongs, while the other one is to calculate the exact value of the demand in that interval. Table 4.4 exhibits demand computation result sample of AC 260 Gr 79 x 109.



Table 4. 4 Demand Result Sample of AC 260 Gr 79 x 109

| Period | Random Number | Demand |
|--------|---------------|--------|
| 1      | 0.37908644    | 0      |
| 2      | 0.676692873   | 0      |
| 3      | 0.584171529   | 0      |
| 4      | 0.299375712   | 0      |
| 5      | 0.461128874   | 0      |
| 6      | 0.038542578   | 0      |
| 7      | 0.869049877   | 0      |
| 8      | 0.381029099   | 0      |
| 9      | 0.991766987   | 9.84   |
| 10     | 0.808987126   | 0      |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| 356    | 0.651157555   | 0      |
| 357    | 0.128424978   | 0      |
| 358    | 0.774620647   | 0      |
| 359    | 0.054967462   | 0      |
| 360    | 0.923840959   | 0.14   |
| 361    | 0.377925919   | 0      |
| 362    | 0.037444599   | 0      |
| 363    | 0.573657059   | 0      |
| 364    | 0.328531427   | 0      |
| 365    | 0.605064402   | 0      |

With the same method, demand is generated for all raw material samples.

Figure 4.3 and 4.4 shows histogram and time series plot, while Table 4.5 and 4.6 arrays probability distribution and generate demand result sample of DC 400 Gr 79 x 109, respectively.

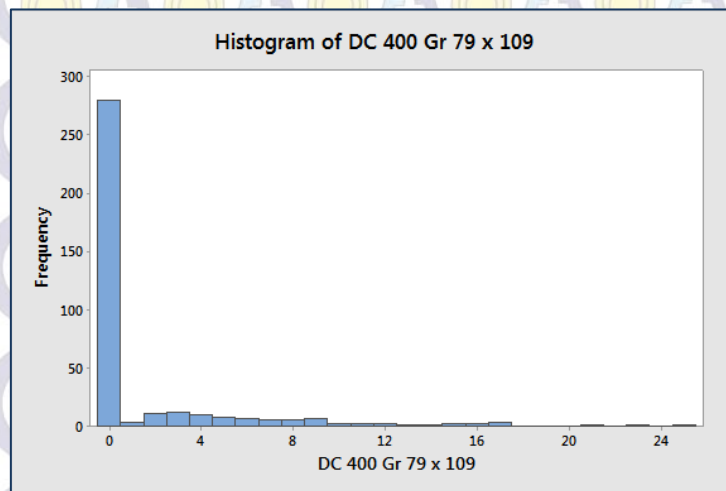


Figure 4. 3 Histogram of DC 400 Gr 79 x 109 Demand

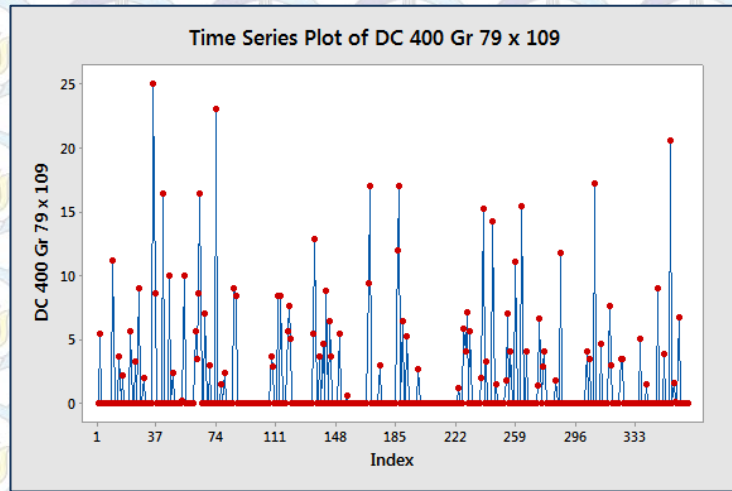


Figure 4. 4 Time Series Plot of DC 400 Gr 79 x 109 Demand

Table 4. 5 Probability Distribution of DC 400 Gr 79 x 109

| Interval         | Frequency | Probability | Lower Limit | Upper Limit |
|------------------|-----------|-------------|-------------|-------------|
| 0                | 277       | 0.75890     | 0           | 0.7589      |
| $0 < x \leq 3$   | 22        | 0.06027     | 0.7590      | 0.8193      |
| $3 < x \leq 6$   | 29        | 0.07945     | 0.8194      | 0.8988      |
| $6 < x \leq 9$   | 18        | 0.04932     | 0.8989      | 0.9482      |
| $9 < x \leq 12$  | 7         | 0.01918     | 0.9483      | 0.9675      |
| $12 < x \leq 15$ | 2         | 0.00548     | 0.9676      | 0.9731      |
| $15 < x \leq 18$ | 7         | 0.01918     | 0.9732      | 0.9924      |
| $18 < x \leq 21$ | 1         | 0.00274     | 0.9925      | 0.9952      |
| $21 < x \leq 24$ | 1         | 0.00274     | 0.9953      | 0.9981      |
| $24 < x \leq 27$ | 1         | 0.00274     | 0.9982      | 1           |

Table 4. 6 Demand Result Sample of DC 400 Gr 79 x 109

| Period | Random Number | Demand |
|--------|---------------|--------|
| 1      | 0.296081286   | 0      |
| 2      | 0.519320754   | 0      |
| 3      | 0.48255717    | 0      |
| 4      | 0.689665916   | 0      |
| 5      | 0.902949905   | 6.84   |
| 6      | 0.706997504   | 0      |
| 7      | 0.69488096    | 0      |
| 8      | 0.334312828   | 0      |
| 9      | 0.294415342   | 0      |
| 10     | 0.313111194   | 0      |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| 356    | 0.833570796   | 4.94   |
| 357    | 0.101729227   | 0      |
| 358    | 0.102758172   | 0      |
| 359    | 0.749732843   | 0      |



Table 4. 6 Demand Result Sample of DC 400 Gr 79 x 109 (continued)

| Period | Random Number | Demand |
|--------|---------------|--------|
| 360    | 0.345417244   | 0      |
| 361    | 0.707366921   | 0      |
| 362    | 0.452267742   | 0      |
| 363    | 0.661913211   | 0      |
| 364    | 0.383115005   | 0      |
| 365    | 0.814736753   | 0.13   |

Figure 4.5 and 4.6 shows histogram and time series plot, while Table 4.7 and 4.8 arrays probability distribution and generate demand result sample of DC 250 Gr 89 x 120, respectively.

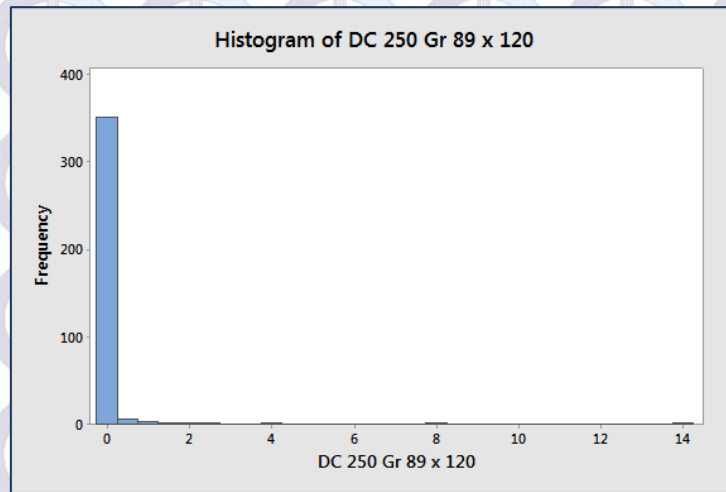


Figure 4. 5 Histogram of DC 250 Gr 89 x 120 Demand

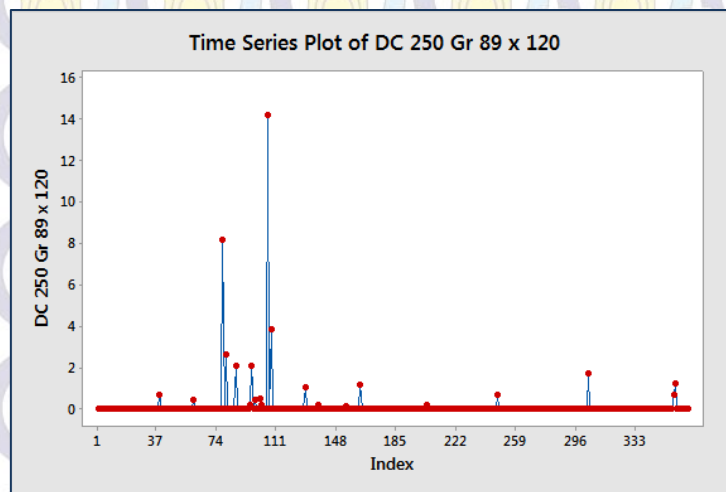


Figure 4. 6 Time Series Plot of DC 250 Gr 89 x 120 Demand

Table 4. 7 Probability Distribution of DC 250 Gr 89 x 120

| Interval           | Frequency | Probability | Lower Limit | Upper Limit |
|--------------------|-----------|-------------|-------------|-------------|
| 0                  | 344       | 0.94247     | 0           | 0.9425      |
| $0 < x \leq 1.5$   | 14        | 0.03836     | 0.9426      | 0.9809      |
| $1.5 < x \leq 3$   | 4         | 0.01096     | 0.9810      | 0.9920      |
| $3 < x \leq 4.5$   | 1         | 0.00274     | 0.9921      | 0.9948      |
| $4.5 < x \leq 6$   | 0         | 0.00000     | 0.9949      | 0.9949      |
| $6 < x \leq 7.5$   | 0         | 0.00000     | 0.9950      | 0.9950      |
| $7.5 < x \leq 9$   | 1         | 0.00274     | 0.9951      | 0.9979      |
| $9 < x \leq 10.5$  | 0         | 0.00000     | 0.9980      | 0.9980      |
| $10.5 < x \leq 12$ | 0         | 0.00000     | 0.9981      | 0.9981      |
| $12 < x \leq 13.5$ | 0         | 0.00000     | 0.9982      | 0.9982      |
| $13.5 < x \leq 15$ | 1         | 0.00274     | 0.9983      | 1           |

Table 4. 8 Demand Result Sample of DC 250 Gr 89 x 120

| Period | Random Number | Demand |
|--------|---------------|--------|
| 1      | 0.474113854   | 0      |
| 2      | 0.096948374   | 0      |
| 3      | 0.320922025   | 0      |
| 4      | 0.796363405   | 0      |
| 5      | 0.640276106   | 0      |
| 6      | 0.41973487    | 0      |
| 7      | 0.000538694   | 0      |
| 8      | 0.189843324   | 0      |
| 9      | 0.774791713   | 0      |
| 10     | 0.007478132   | 0      |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| 356    | 0.717547198   | 0      |
| 357    | 0.482964425   | 0      |
| 358    | 0.826786171   | 0      |
| 359    | 0.062032642   | 0      |
| 360    | 0.343028975   | 0      |
| 361    | 0.573103586   | 0      |
| 362    | 0.935223163   | 0      |
| 363    | 0.29519571    | 0      |
| 364    | 0.849863918   | 0      |
| 365    | 0.978432682   | 1.29   |

Figure 4.7 and 4.8 shows histogram and time series plot, while Table 4.9 and 4.10 arrays probability distribution and generate demand result sample of AC 360 Gr 79 x109, respectively.



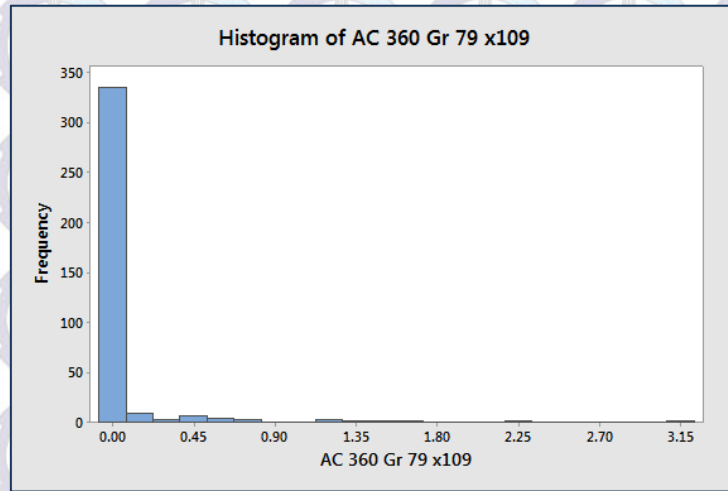


Figure 4. 7 Histogram of AC 360 Gr 79 x109 Demand

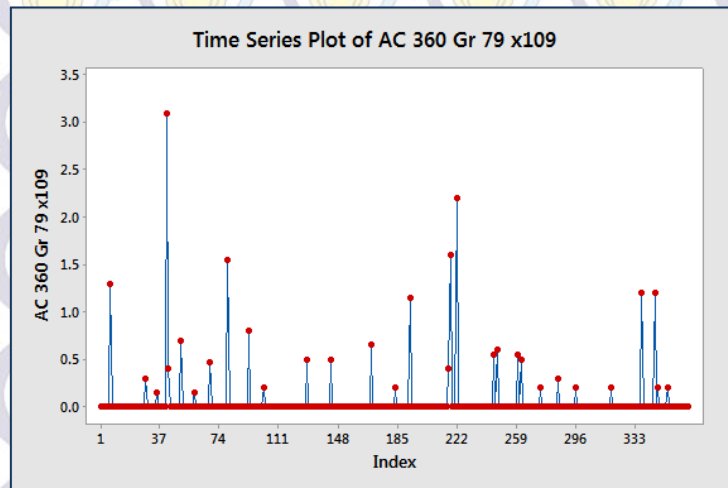


Figure 4. 8 Time Series Plot of AC 360 Gr 79 x109 Demand

Table 4. 9 Probability Distribution of AC 360 Gr 79 x109

| Interval           | Frequency | Probability | Lower Limit | Upper Limit |
|--------------------|-----------|-------------|-------------|-------------|
| 0                  | 334       | 0.91507     | 0           | 0.9151      |
| $0 < x \leq 0.3$   | 11        | 0.03014     | 0.9152      | 0.9453      |
| $0.3 < x \leq 0.6$ | 9         | 0.02466     | 0.9454      | 0.9701      |
| $0.6 < x \leq 0.9$ | 3         | 0.00822     | 0.9702      | 0.9784      |
| $0.9 < x \leq 1.2$ | 3         | 0.00822     | 0.9785      | 0.9867      |
| $1.2 < x \leq 1.5$ | 1         | 0.00274     | 0.9868      | 0.9895      |
| $1.5 < x \leq 1.8$ | 2         | 0.00548     | 0.9896      | 0.9951      |
| $1.8 < x \leq 2.1$ | 0         | 0.00000     | 0.9952      | 0.9952      |
| $2.1 < x \leq 2.4$ | 1         | 0.00274     | 0.9953      | 0.9981      |
| $2.4 < x \leq 2.7$ | 0         | 0.00000     | 0.9982      | 0.9982      |
| $2.7 < x \leq 3$   | 0         | 0.00000     | 0.9983      | 0.9983      |
| $3 < x \leq 3.3$   | 1         | 0.00274     | 0.9984      | 1           |

Table 4. 10 Demand Result Sample of AC 360 Gr 79 x109

| Period | Random Number | Demand |
|--------|---------------|--------|
| 1      | 0.689946391   | 0      |
| 2      | 0.245511673   | 0      |
| 3      | 0.302380269   | 0      |
| 4      | 0.573668765   | 0      |
| 5      | 0.776351083   | 0      |
| 6      | 0.312780455   | 0      |
| 7      | 0.611295422   | 0      |
| 8      | 0.483162464   | 0      |
| 9      | 0.610913522   | 0      |
| 10     | 0.544056403   | 0      |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| 356    | 0.944982513   | 0.28   |
| 357    | 0.575852971   | 0      |
| 358    | 0.243883633   | 0      |
| 359    | 0.485277461   | 0      |
| 360    | 0.798270783   | 0      |
| 361    | 0.231531714   | 0      |
| 362    | 0.80464142    | 0      |
| 363    | 0.953941516   | 0.55   |
| 364    | 0.799780103   | 0      |
| 365    | 0.864556631   | 0      |

Figure 4.9 and 4.10 shows histogram and time series plot, while Table 4.11 and 4.12 arrays probability distribution and generate demand result sample of AC 230 Gr 79 x 109, respectively.

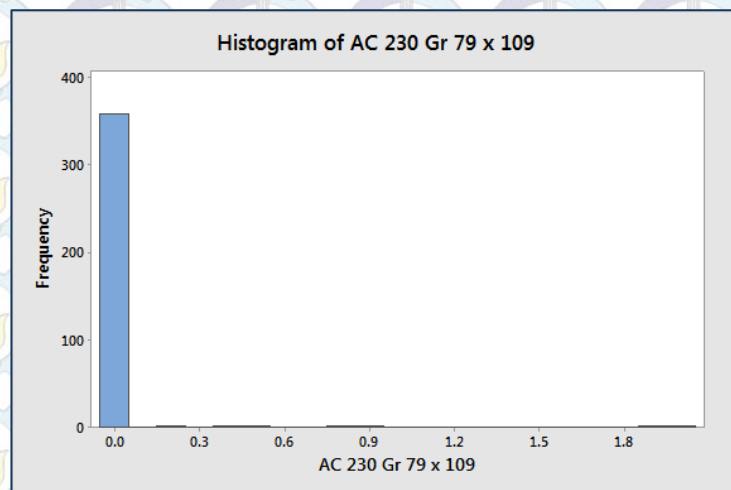


Figure 4. 9 Histogram of AC 230 Gr 79 x 109 Demand



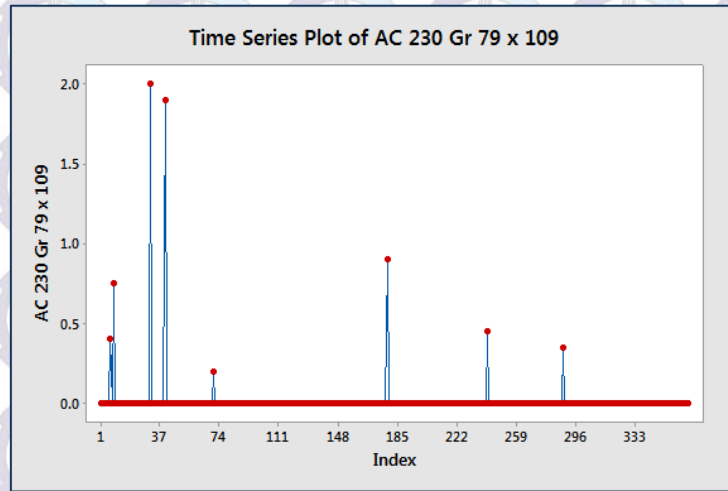


Figure 4. 10 Time Series Plot of AC 230 Gr 79 x 109 Demand

Table 4. 11 Probability Distribution of AC 230 Gr 79 x 109

| Interval           | Frequency | Probability | Lower Limit | Upper Limit |
|--------------------|-----------|-------------|-------------|-------------|
| 0                  | 357       | 0.97808     | 0           | 0.9781      |
| $0 < x \leq 0.2$   | 1         | 0.00274     | 0.9782      | 0.9809      |
| $0.2 < x \leq 0.4$ | 2         | 0.00548     | 0.9810      | 0.9865      |
| $0.4 < x \leq 0.6$ | 1         | 0.00274     | 0.9866      | 0.9893      |
| $0.6 < x \leq 0.8$ | 1         | 0.00274     | 0.9894      | 0.9922      |
| $0.8 < x \leq 1$   | 1         | 0.00274     | 0.9923      | 0.9950      |
| $1 < x \leq 1.2$   | 0         | 0.00000     | 0.9951      | 0.9951      |
| $1.2 < x \leq 1.4$ | 0         | 0.00000     | 0.9952      | 0.9952      |
| $1.4 < x \leq 1.6$ | 0         | 0.00000     | 0.9953      | 0.9953      |
| $1.6 < x \leq 1.8$ | 0         | 0.00000     | 0.9954      | 0.9954      |
| $1.8 < x \leq 2$   | 2         | 0.00548     | 0.9955      | 1           |

Table 4. 12 Demand Result Sample of AC 230 Gr 79 x 109

| Period | Random Number | Demand |
|--------|---------------|--------|
| 1      | 0.975238593   | 0      |
| 2      | 0.729968767   | 0      |
| 3      | 0.835700867   | 0      |
| 4      | 0.388530238   | 0      |
| 5      | 0.047089226   | 0      |
| 6      | 0.513459502   | 0      |
| 7      | 0.567749705   | 0      |
| 8      | 0.859668221   | 0      |
| 9      | 0.256515403   | 0      |
| 10     | 0.662296825   | 0      |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| 356    | 0.11310583    | 0      |
| 357    | 0.009597973   | 0      |
| 358    | 0.352098861   | 0      |

Table 4. 12 Demand Result Sample of AC 230 Gr 79 x 109 (continued)

| Period | Random Number | Demand |
|--------|---------------|--------|
| 359    | 0.41829283    | 0      |
| 360    | 0.758938024   | 0      |
| 361    | 0.45603715    | 0      |
| 362    | 0.912635222   | 0      |
| 363    | 0.970496928   | 0      |
| 364    | 0.984629845   | 0.32   |
| 365    | 0.738946757   | 0      |

Figure 4.11 and 4.12 shows histogram and time series plot, while Table 4.13 and 4.14 arrays probability distribution and generate demand result sample of Bontak Sticker 54 x 70, respectively.

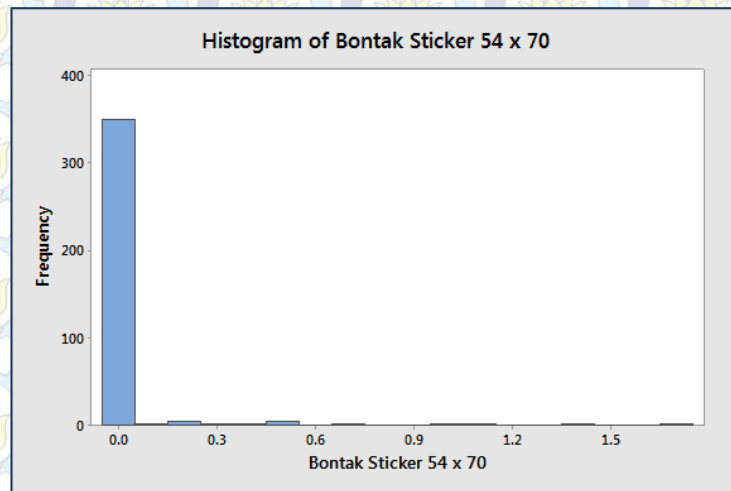


Figure 4. 11 Histogram of Bontak Sticker 54 x 70 Demand

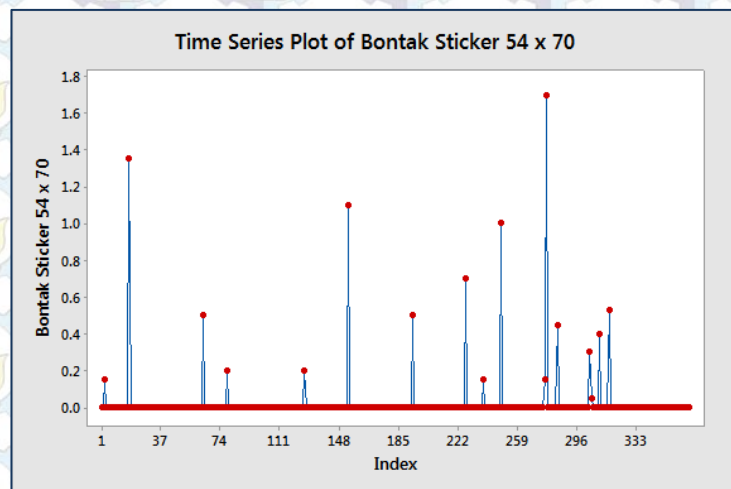


Figure 4. 12 Time Series Plot of Bontak Sticker 54 x 70 Demand



Table 4. 13 Probability Distribution of Bontak Sticker 54 x 70

| Interval           | Frequency | Probability | Lower Limit | Upper Limit |
|--------------------|-----------|-------------|-------------|-------------|
| 0                  | 348       | 0.95342     | 0           | 0.9534      |
| $0 < x \leq 0.2$   | 6         | 0.01644     | 0.9535      | 0.9700      |
| $0.2 < x \leq 0.4$ | 2         | 0.00548     | 0.9701      | 0.9755      |
| $0.4 < x \leq 0.6$ | 4         | 0.01096     | 0.9756      | 0.9866      |
| $0.6 < x \leq 0.8$ | 1         | 0.00274     | 0.9867      | 0.9894      |
| $0.8 < x \leq 1$   | 1         | 0.00274     | 0.9895      | 0.9923      |
| $1 < x \leq 1.2$   | 1         | 0.00274     | 0.9924      | 0.9951      |
| $1.2 < x \leq 1.4$ | 1         | 0.00274     | 0.9952      | 0.9980      |
| $1.4 < x \leq 1.6$ | 0         | 0.00000     | 0.9981      | 0.9981      |
| $1.6 < x \leq 1.8$ | 1         | 0.00274     | 0.9982      | 1           |

Table 4. 14 Demand Result Sample of Bontak Sticker 54 x 70

| Period | Random Number | Demand |
|--------|---------------|--------|
| 1      | 0.202363253   | 0      |
| 2      | 0.626068294   | 0      |
| 3      | 0.257133721   | 0      |
| 4      | 0.357709934   | 0      |
| 5      | 0.097508482   | 0      |
| 6      | 0.638294242   | 0      |
| 7      | 0.059096074   | 0      |
| 8      | 0.121748323   | 0      |
| 9      | 0.943923649   | 0      |
| 10     | 0.46693914    | 0      |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| ...    | ...           | ...    |
| 356    | 0.528586757   | 0      |
| 357    | 0.669813041   | 0      |
| 358    | 0.848540504   | 0      |
| 359    | 0.738201277   | 0      |
| 360    | 0.318422085   | 0      |
| 361    | 0.944767784   | 0      |
| 362    | 0.279772226   | 0      |
| 363    | 0.320917335   | 0      |
| 364    | 0.097772944   | 0      |
| 365    | 0.043020259   | 0      |

#### 4.2.4 Verification and Validation

After obtaining demand for the following year, in 365 periods, the next step is prior to scenario generation is to verify and validate the data from Monte Carlo simulation. Verification and validation is important to trace whether or not the generated data can represent historical data. If the generated data cannot represent historical data, simulation has to be repeated.



As a means to verify the simulation, steps carried out in Monte Carlo simulation is checked whether or not it has followed the accurate steps stated in subchapter 2.3. Once it has followed the procedure, the simulation is verified.

While for the validation, Welch confidence interval for comparing two systems statistical test is conducted. This method compares two different systems; in this case is the historical demand and the demand generated through Monte Carlo simulation. The hypotheses are formulated below.

$$H_0 : \mu_1 - \mu_2 = 0$$

$$H_1 : \mu_1 - \mu_2 \neq 0$$

First step is calculating the degree of freedom ( $df$ ) from both existing and simulation data. The mathematical expression to calculate  $df$  is as follows (Law and Kelton, 2000).

$$df = \frac{[s_1^2/n_1 + s_2^2/n_2]^2}{[s_1^2/n_1]^2/(n_1-1) + [s_2^2/n_2]^2/(n_2-1)} \quad (4.3)$$

The value of  $df$  will be an input for the calculation of half width ( $hw$ ). With the significance level of 95% ( $\alpha = 0.05$ ),  $hw$  can be calculated using Equation 4.4 (Law and Kelton, 2000).

$$hw = t_{df, \alpha/2} \cdot \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}} \quad (4.4)$$

T value is obtained utilizing the help of Microsoft Excel software. The next step is to define confidence interval using predetermined significance level.

$$(\bar{X}_1 - \bar{X}_2) - hw \leq \mu_1 - \mu_2 \leq (\bar{X}_1 - \bar{X}_2) + hw$$

If zero lays between the confidence interval, it considers  $\mu_1 - \mu_2$  equals to zero and, thus,  $H_0$  is accepted, which indicates that the simulation is valid (there is no



significant difference between existing data and simulation result). Table 4.15 and 4.16 recapitulates the results of data validation.

Table 4. 15 Validation Input Parameters

| Raw Material Type      | Existing    |           |       | Simulation  |             |       |
|------------------------|-------------|-----------|-------|-------------|-------------|-------|
|                        | $\bar{X}_1$ | $S_1^2$   | $n_1$ | $\bar{X}_2$ | $S_2^2$     | $n_2$ |
| AC 260 Gr 79 x 109     | 0.3932877   | 3.670243  | 365   | 0.32172131  | 2.668996755 | 365   |
| DC 400 Gr 79 x 109     | 1.6306027   | 14.975966 | 365   | 1.53172603  | 15.10037476 | 365   |
| DC 250 Gr 89 x 120     | 0.116274    | 0.8301162 | 365   | 0.15953425  | 1.406477267 | 365   |
| AC 360 Gr 79 x 109     | 0.0608767   | 0.0774505 | 365   | 0.04309589  | 0.051826449 | 365   |
| AC 230 Gr 79 x 109     | 0.0190411   | 0.0256864 | 365   | 0.01893151  | 0.024438468 | 365   |
| Bontak Sticker 54 x 70 | 0.0258356   | 0.0234327 | 365   | 0.03073973  | 0.025195733 | 365   |

Table 4. 16 Recapitulation of Simulation Data Validation Results

| Raw Material Type      | Validation |                    |           |                     |                               |          |
|------------------------|------------|--------------------|-----------|---------------------|-------------------------------|----------|
|                        | $df$       | $t_{df, \alpha/2}$ | $hw$      | Confidence Interval |                               | Decision |
| AC 260 Gr 79 x 109     | 710.28106  | 1.9633108          | 0.2587386 | -0.1871722          | $< \mu_1 - \mu_2 < 0.330305$  | Valid    |
| DC 400 Gr 79 x 109     | 727.98754  | 1.9632324          | 0.5635569 | -0.4646802          | $< \mu_1 - \mu_2 < 0.6624336$ | Valid    |
| DC 250 Gr 89 x 120     | 682.66606  | 1.9634485          | 0.1536974 | -0.1969577          | $< \mu_1 - \mu_2 < 0.1104372$ | Valid    |
| AC 360 Gr 79 x 109     | 700.48003  | 1.9633587          | 0.0369499 | -0.0191691          | $< \mu_1 - \mu_2 < 0.0547308$ | Valid    |
| AC 230 Gr 79 x 109     | 727.54906  | 1.9632324          | 0.0230066 | -0.022897           | $< \mu_1 - \mu_2 < 0.0231162$ | Valid    |
| Bontak Sticker 54 x 70 | 727.04435  | 1.9632324          | 0.0226605 | -0.0275647          | $< \mu_1 - \mu_2 < 0.0177564$ | Valid    |

#### 4.2.5 Generate Lead Time

Similarly to demand, raw material shipment lead time is also generated with Monte Carlo Simulation. Lead time is generated for the following shipment of raw material; each raw material indeed has distinctive lead time duration. In this subchapter, each raw material's probability distribution and generate lead time result sample will be elaborated. Table 4.17 shows AC 260 Gr 79 x 109 lead time probability distribution.

Table 4. 17 Lead Time Probability Distribution of AC 260 Gr 79 x 109

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 1         | 3         | 0.15        | 0           | 0.15        |
| 2         | 7         | 0.35        | 0.15        | 0.5         |
| 3         | 6         | 0.3         | 0.5         | 0.8         |
| 4         | 2         | 0.1         | 0.8         | 0.9         |
| 5         | 0         | 0           |             |             |
| 6         | 1         | 0.05        | 0.9         | 0.95        |
| 7         | 0         | 0           |             |             |
| 8         | 1         | 0.05        | 0.95        | 1           |



Using the probability distribution table, random value is generated to obtain lead time in the following year. Table 4.18 displays the lead time result sample of AC 260 Gr 79 x 109.

Table 4. 18 Lead Time Result Sample of AC 260 Gr 79 x 109

| No  | Random Value | Lead Time |
|-----|--------------|-----------|
| 1   | 0.306615787  | 2         |
| 2   | 0.330952631  | 2         |
| 3   | 0.32225521   | 2         |
| 4   | 0.198511824  | 2         |
| 5   | 0.752848614  | 3         |
| 6   | 0.430702853  | 2         |
| 7   | 0.384935765  | 2         |
| 8   | 0.296555989  | 2         |
| 9   | 0.851875869  | 4         |
| 10  | 0.471030191  | 2         |
| ... | ...          | ...       |
| ... | ...          | ...       |

Table 4.19 shows DC 400 Gr 79 x 109 lead time probability distribution, while Table 4.20 displays the lead time result sample of DC 400 Gr 79 x 109.

Table 4. 19 Lead Time Probability Distribution of DC 400 Gr 79 x 109

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 3         | 1         | 0.0370      | 0           | 0.0370      |
| 4         | 5         | 0.1852      | 0.0370      | 0.2222      |
| 5         | 7         | 0.2593      | 0.2222      | 0.4815      |
| 6         | 6         | 0.2222      | 0.4815      | 0.7037      |
| 7         | 4         | 0.1481      | 0.7037      | 0.8519      |
| 8         | 2         | 0.0741      | 0.8519      | 0.9259      |
| 9         | 0         | 0.0000      |             |             |
| 10        | 2         | 0.0741      | 0.9259      | 1.0000      |

Table 4. 20 Lead Time Result Sample of DC 400 Gr 79 x 109

| No | Random Value | Lead Time |
|----|--------------|-----------|
| 1  | 0.168240426  | 4         |
| 2  | 0.955605751  | 10        |
| 3  | 0.95078021   | 10        |
| 4  | 0.907546587  | 8         |
| 5  | 0.053499573  | 4         |
| 6  | 0.248615504  | 5         |
| 7  | 0.605974725  | 6         |
| 8  | 0.118686256  | 4         |



Table 4. 20 Lead Time Result Sample of DC 400 Gr 79 x 109 (continued)

| No  | Random Value | Lead Time |
|-----|--------------|-----------|
| 9   | 0.464993571  | 5         |
| 10  | 0.012957888  | 3         |
| ... | ...          | ...       |
| ... | ...          | ...       |

Table 4.21 shows DC 250 Gr 89 x 120 lead time probability distribution, while Table 4.22 displays the lead time result sample of DC 250 Gr 89 x 120.

Table 4. 21 Lead Time Probability Distribution of DC 250 Gr 89 x 120

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 1         | 1         | 0.0909      | 0           | 0.0909      |
| 2         | 1         | 0.0909      | 0.0909      | 0.1818      |
| 3         | 2         | 0.1818      | 0.1818      | 0.3636      |
| 4         | 1         | 0.0909      | 0.3636      | 0.4545      |
| 5         | 3         | 0.2727      | 0.4545      | 0.7273      |
| 6         | 2         | 0.1818      | 0.7273      | 0.9091      |
| 7         | 1         | 0.0909      | 0.9091      | 1.0000      |

Table 4. 22 Lead Time Result Sample of DC 250 Gr 89 x 120

| No  | Random Value | Lead Time |
|-----|--------------|-----------|
| 1   | 0.515072389  | 5         |
| 2   | 0.414892158  | 4         |
| 3   | 0.970881529  | 7         |
| 4   | 0.832957125  | 6         |
| 5   | 0.242384558  | 3         |
| 6   | 0.085927042  | 1         |
| 7   | 0.14306035   | 2         |
| 8   | 0.231879825  | 3         |
| 9   | 0.002639839  | 1         |
| 10  | 0.511947173  | 5         |
| ... | ...          | ...       |
| ... | ...          | ...       |

Table 4.23 shows AC 360 Gr 79 x 109 lead time probability distribution, while Table 4.24 displays the lead time result sample of AC 360 Gr 79 x 109.

Table 4. 23 Lead Time Probability Distribution of AC 360 Gr 79 x 109

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 2         | 2         | 0.1667      | 0           | 0.1667      |
| 3         | 1         | 0.0833      | 0.1667      | 0.2500      |
| 4         | 6         | 0.5000      | 0.2500      | 0.7500      |

Table 4. 23 Lead Time Probability Distribution of AC 360 Gr 79 x 109 (continued)

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 5         | 2         | 0.1667      | 0.7500      | 0.9167      |
| 6         | 0         | 0.0000      |             |             |
| 7         | 0         | 0.0000      |             |             |
| 8         | 1         | 0.0833      | 0.9167      | 1.0000      |

Table 4. 24 Lead Time Result Sample of AC 360 Gr 79 x 109

| No  | Random Value | Lead Time |
|-----|--------------|-----------|
| 1   | 0.572434301  | 4         |
| 2   | 0.151398919  | 2         |
| 3   | 0.735271173  | 4         |
| 4   | 0.464565512  | 4         |
| 5   | 0.022851378  | 2         |
| 6   | 0.730372281  | 4         |
| 7   | 0.070921864  | 2         |
| 8   | 0.427746454  | 4         |
| 9   | 0.117090198  | 2         |
| 10  | 0.361046801  | 4         |
| ... | ...          | ...       |
| ... | ...          | ...       |

Table 4.25 shows AC 230 Gr 79 x 109 lead time probability distribution, while Table 4.26 displays the lead time result sample of AC 230 Gr 79 x 109.

Table 4. 25 Lead Time Probability Distribution of AC 230 Gr 79 x 109

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 2         | 2         | 0.5         | 0           | 0.5         |
| 3         | 1         | 0.25        | 0.5         | 0.75        |
| 4         | 1         | 0.25        | 0.75        | 1           |

Table 4. 26 Lead Time Result Sample of AC 230 Gr 79 x 109

| No  | Random Value | Lead Time |
|-----|--------------|-----------|
| 1   | 0.765764431  | 4         |
| 2   | 0.336482979  | 2         |
| 3   | 0.389913317  | 2         |
| 4   | 0.743263233  | 3         |
| ... | ...          | ...       |
| ... | ...          | ...       |



Table 4.27 shows Bontak Sticker 54 x 70 lead time probability distribution, while Table 4.28 displays the lead time result sample of Bontak Sticker 54 x 70.

Table 4. 27 Lead Time Probability Distribution of Bontak Sticker 54 x 70

| Lead Time | Frequency | Probability | Lower Limit | Upper Limit |
|-----------|-----------|-------------|-------------|-------------|
| 1         | 2         | 0.4         | 0           | 0.4         |
| 2         | 1         | 0.2         | 0.4         | 0.6         |
| 3         | 1         | 0.2         | 0.6         | 0.8         |
| 4         | 1         | 0.2         | 0.8         | 1           |

Table 4. 28 Lead Time Result Sample of Bontak Sticker 54 x 70

| No  | Random Value | Lead Time |
|-----|--------------|-----------|
| 1   | 0.625147001  | 3         |
| 2   | 0.9472991    | 3         |
| 3   | 0.993338326  | 4         |
| 4   | 0.147406531  | 1         |
| ... | ...          | ...       |
| ... | ...          | ...       |

### 4.3 Scenario Generation and Experiment

After obtaining all input parameters to simulate the inventory control system, the next step is to build scenarios. At the first place, number of replication is determined for each raw material to account for inherent random variation which may not represent the real condition. Apart from the existing condition, this study tries to find alternative ways to reduce total inventory cost while maintaining acceptable service level specified by the company. As stated earlier in this paper, there must be a trade-offs between inventory holding cost and stock out cost. It may be the case that reducing inventory on hand level leads to high occurrence of stock out. On the other hand, keeping high volume of inventory might reduce stock out occurrence yet burden the company with higher holding cost. Some of inventory control system alternatives explored in this paper are continuous review (s, Q system) and periodic (R, s, S system). Given that inventory problem in the company is moderately complicated, simple heuristic for each alternative will be carried out.



### 4.3.1 Number of Replication

In many cases, the number of replications needed is not discussed in any detail, and a number between 5 and 10 is usually taken. Nonetheless, by using the approximation that the number of replication grows quadratically as the half width decreases, the mathematical expression to determine replication number is as follows (Law and Kelton, 2000).

$$n' \cong n_0 \cdot \frac{h_0^2}{h^2} \quad (4.5)$$

$$h_0 = \left( t_{n-1, 1-\alpha/2} \right) \cdot \frac{s}{\sqrt{n_0}} \quad (4.6)$$

Where,

$h_0$  = half width of initial replications

$\alpha$  = error

$s$  = standard deviation of replications

$n_0$  = initial number of replications

$n'$  = minimum number of replications needed

$h$  = desired half width

Initial replication is set to be 5 replications; when the required number of replications exceeds the initial replication, more replication should be added. The recapitulation of initial replication for each raw material is given in Table 4.29.

Table 4. 29 Initial Recapitulation Demand Output

| Raw Material           | Total Demand Output |               |               |               |               | Standard Deviation | Desired Half Width |
|------------------------|---------------------|---------------|---------------|---------------|---------------|--------------------|--------------------|
|                        | Replication 1       | Replication 2 | Replication 3 | Replication 4 | Replication 5 |                    |                    |
| AC 260 Gr 79 x 109     | 117.8               | 92.7          | 122.6         | 189.5         | 147.4         | 36.6075            | 40                 |
| DC 400 Gr 79 x 109     | 559.08              | 494.83        | 542.38        | 678.67        | 584.73        | 68.0808            | 77                 |
| DC 250 Gr 89 x 120     | 58.23               | 69.95         | 44.99         | 24.65         | 70.53         | 19.2847            | 20                 |
| AC 360 Gr 79 x 109     | 15.73               | 22.02         | 18.99         | 24.69         | 16.1          | 3.8510             | 10                 |
| AC 230 Gr 79 x 109     | 6.91                | 6.8           | 8.03          | 3.07          | 1.35          | 2.8656             | 3                  |
| Bontak Sticker 54 x 70 | 11.22               | 9.22          | 8.28          | 5.44          | 2.98          | 3.2424             | 4                  |

For the desired half width, the company still permits to stock raw material which is categorized in A class up until 95 million Rupiah; raw material which is



categorized in B class up until 20 million Rupiah; raw material which is categorized in C class up until 5 million Rupiah.

Using Equation 4.5 and 4.6, required number of replication for each sample are calculated and recapitulated in Table 4.28.

Table 4. 30 Required Number of Replication for Each Sample

| Raw Material           | Required Number of Replication |
|------------------------|--------------------------------|
| AC 260 Gr 79 x 109     | 7                              |
| DC 400 Gr 79 x 109     | 7                              |
| DC 250 Gr 89 x 120     | 8                              |
| AC 360 Gr 79 x 109     | 2                              |
| AC 230 Gr 79 x 109     | 8                              |
| Bontak Sticker 54 x 70 | 6                              |

These required numbers of replication will determine how many times the iteration will be performed for existing system, continuous review, and periodic review inventory control system for each sample.

### 4.3.2 Existing Inventory Control System

At this moment in time, company place an order biweekly for high usage raw materials, monthly for normal usage raw materials, once every three months for low usage raw materials, and/or whenever on hand inventory cannot accommodate the demand issued by customers. While for the order size, company orders approximately five times of demand on average. Appendix B and C deliberates data for existing inventory control system; Appendix B presents complete calculation replications for raw material AC 260 Gr 79 x 109, while Appendix C consists the lead time for the same raw material type. Other existing inventory control system calculation for the rest of raw materials types follow the logic presented in Appendix B and Appendix C.

#### 4.3.2.1 AC 260 Gr 79 x 109

Raw material type AC 260 Gr 79 x 109 represents raw materials in A class with high CV. Table 4.31 shows the calculation exemplification of the first replication.



Table 4. 31 Replication 1 of AC 260 Gr 79 x 109 Existing Inventory Control System

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |      | 9.84   | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 10-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 11-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 12-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 13-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 14-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 15-Jan-15 | 10.9  |      | 0      | 74.91             | Rp 131,774.28 |                | Rp 57,386.30 | Rp 189,160.58        |
| 16-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 17-Jan-15 |       | 10.9 | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 18-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 19-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 20-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       | 10.9 | 0.34   | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 19-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 20-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 21-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 22-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 23-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 24-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 25-Dec-15 |       |      | 0      | 217.84            |               |                | Rp166,880.69 | Rp 166,880.69        |
| 26-Dec-15 |       |      | 0.14   | 217.7             |               |                | Rp166,773.44 | Rp 166,773.44        |
| 27-Dec-15 |       |      | 0      | 217.7             |               |                | Rp166,773.44 | Rp 166,773.44        |
| 28-Dec-15 |       |      | 0      | 217.7             |               |                | Rp166,773.44 | Rp 166,773.44        |
| 29-Dec-15 |       |      | 0      | 217.7             |               |                | Rp166,773.44 | Rp 166,773.44        |
| 30-Dec-15 |       |      | 0      | 217.7             |               |                | Rp166,773.44 | Rp 166,773.44        |
| 31-Dec-15 |       |      | 0      | 217.7             |               |                | Rp166,773.44 | Rp 166,773.44        |
|           |       |      |        |                   |               |                |              | Rp 42,183,290.20     |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.32 recapitulates the output of existing inventory control system for AC 260 Gr 79 x 109.

Table 4. 32 Recapitulation of AC 260 Gr 79 x 109 Existing Inventory Control System

|               | Total Customer Order | Existing         |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 33                   | 0                | 100.00%       | Rp 42,183,290.20 |
| Replication 2 | 39                   | 0                | 100.00%       | Rp 49,479,946.07 |
| Replication 3 | 41                   | 0                | 100.00%       | Rp 43,378,106.59 |
| Replication 4 | 48                   | 0                | 100.00%       | Rp 39,176,779.53 |
| Replication 5 | 48                   | 0                | 100.00%       | Rp 37,075,418.88 |
| Replication 6 | 48                   | 0                | 100.00%       | Rp 37,856,741.34 |
| Replication 7 | 43                   | 0                | 100.00%       | Rp 40,573,294.50 |
|               |                      |                  |               | Rp 41,525,047.10 |



#### 4.3.2.2 DC 400 Gr 79 x 109

Raw material type DC 400 Gr 79 x 109 represents raw materials in A class with low CV. Table 4.33 shows the calculation exemplification of the first replication.

Table 4. 33 Replication 1 of DC 400 Gr 79 x 109 Existing Inventory Control System

| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |       | 0      | 68.51             |               |                | Rp 28,224.06 | Rp 28,224.06         |
| 1-Jan-15  |       |       | 0      | 68.51             |               |                | Rp 28,224.06 | Rp 28,224.06         |
| 2-Jan-15  |       |       | 0      | 68.51             |               |                | Rp 28,224.06 | Rp 28,224.06         |
| 3-Jan-15  |       |       | 0      | 68.51             |               |                | Rp 28,224.06 | Rp 28,224.06         |
| 4-Jan-15  |       |       | 0      | 68.51             |               |                | Rp 28,224.06 | Rp 28,224.06         |
| 5-Jan-15  |       |       | 6.84   | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 6-Jan-15  |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 7-Jan-15  |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 8-Jan-15  |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 9-Jan-15  |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 10-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 11-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 12-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 13-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 14-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 15-Jan-15 | 18.59 |       | 0      | 61.67             | Rp 131,774.28 |                | Rp 25,406.19 | Rp 157,180.47        |
| 16-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 17-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 18-Jan-15 |       |       | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 19-Jan-15 |       | 18.59 | 1.49   | 78.77             |               |                | Rp 32,450.88 | Rp 32,450.88         |
| 20-Jan-15 |       |       | 1.71   | 77.06             |               |                | Rp 31,746.41 | Rp 31,746.41         |
| ...       | ...   | ...   | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ...   | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       |       | 0      | 36.46             |               |                | Rp 15,020.43 | Rp 15,020.43         |
| 19-Dec-15 |       |       | 0      | 36.46             |               |                | Rp 15,020.43 | Rp 15,020.43         |
| 20-Dec-15 |       |       | 0      | 36.46             |               |                | Rp 15,020.43 | Rp 15,020.43         |
| 21-Dec-15 |       | 18.59 | 17.35  | 37.7              |               |                | Rp 15,531.27 | Rp 15,531.27         |
| 22-Dec-15 |       |       | 4.94   | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 23-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 24-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 25-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 26-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 27-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 28-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 29-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 30-Dec-15 |       |       | 0      | 32.76             |               |                | Rp 13,496.14 | Rp 13,496.14         |
| 31-Dec-15 |       |       | 0.13   | 32.63             |               |                | Rp 13,442.58 | Rp 13,442.58         |
|           |       |       |        |                   |               |                | Rp           | 16,019,583.89        |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.34 recapitulates the output of existing inventory control system for DC 400 Gr 79 x 109.

Table 4. 34 Recapitulation of DC 400 Gr 79 x 109 Existing Inventory Control System

|               | Total Customer Order | Existing         |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 75                   | 3                | 96.00%        | Rp 16,019,583.89 |
| Replication 2 | 86                   | 2                | 97.67%        | Rp 13,588,590.15 |
| Replication 3 | 86                   | 2                | 97.67%        | Rp 13,198,961.28 |



Table 4. 34 Recapitulation of DC 400 Gr 79 x 109 Existing Inventory Control System (continued)

|               | Total Customer Order | Existing         |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 4 | 100                  | 6                | 94.00%        | Rp 17,097,003.25 |
| Replication 5 | 87                   | 3                | 96.55%        | Rp 13,034,346.28 |
| Replication 6 | 84                   | 1                | 98.81%        | Rp 10,633,904.26 |
| Replication 7 | 88                   | 2                | 97.73%        | Rp 13,301,236.95 |
|               |                      |                  |               | Rp 13,928,731.52 |

#### 4.3.2.3 DC 250 Gr 89 x 120

Raw material type DC 250 Gr 89 x 120 represents raw materials in B class with high CV. Table 4.35 shows the calculation exemplification of the first replication.

Table 4. 35 Replication 1 of DC 250 Gr 89 x 120 Existing Inventory Control System

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 1-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 2-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 3-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 4-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 5-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 6-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 7-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 8-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 9-Jan-15  |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 10-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 11-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 12-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 13-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 14-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 15-Jan-15 | 6.03  |      | 0      | 43.51             | Rp 131,774.28 |                | Rp 14,574.11 | Rp 146,348.39        |
| 16-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 17-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 18-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 19-Jan-15 |       |      | 0      | 43.51             |               |                | Rp 14,574.11 | Rp 14,574.11         |
| 20-Jan-15 |       | 6.03 | 0      | 49.54             |               |                | Rp 16,593.92 | Rp 16,593.92         |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       |      | 0      | 52.9              |               |                | Rp 17,719.38 | Rp 17,719.38         |
| 19-Dec-15 |       | 6.03 | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 20-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 21-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 22-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 23-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 24-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 25-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 26-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 27-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 28-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 29-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 30-Dec-15 |       |      | 0      | 58.93             |               |                | Rp 19,739.19 | Rp 19,739.19         |
| 31-Dec-15 |       |      | 1.29   | 57.64             |               |                | Rp 19,307.09 | Rp 19,307.09         |
|           |       |      |        |                   |               |                |              | Rp 7,566,359.99      |



After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.36 recapitulates the output of existing inventory control system for DC 250 Gr 89 x 120.

Table 4. 36 Recapitulation of DC 250 Gr 89 x 120 Existing Inventory Control System

|               | Total Customer Order | Existing         |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 15                   | 0                | 100.00%       | Rp 7,566,359.99  |
| Replication 2 | 26                   | 0                | 100.00%       | Rp 6,879,326.88  |
| Replication 3 | 21                   | 0                | 100.00%       | Rp 8,814,782.71  |
| Replication 4 | 20                   | 0                | 100.00%       | Rp 10,252,725.79 |
| Replication 5 | 22                   | 0                | 100.00%       | Rp 6,937,908.04  |
| Replication 6 | 18                   | 0                | 100.00%       | Rp 9,935,810.09  |
| Replication 7 | 16                   | 0                | 100.00%       | Rp 9,153,862.71  |
| Replication 8 | 23                   | 1                | 95.65%        | Rp 5,886,299.18  |
|               |                      |                  |               | Rp 8,178,384.42  |

#### 4.3.2.4 AC 360 Gr 79 x109

Raw material type AC 360 Gr 79 x 109 represents raw materials in B class with low CV. Table 4.37 shows the calculation exemplification of the first replication.

Table 4. 37 Replication 1 of AC 360 Gr 79 x 109 Existing Inventory Control System

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 1-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 2-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 3-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 4-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 5-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 6-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 7-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 8-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 9-Jan-15  |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 10-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 11-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 12-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 13-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 14-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 15-Jan-15 | 3.3   |     | 0      | 15.68             | Rp 131,774.28 |                | Rp 11,054.09 | Rp 142,828.37        |
| 16-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 17-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 18-Jan-15 |       |     | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 19-Jan-15 |       | 3.3 | 0.17   | 18.81             |               |                | Rp 13,260.67 | Rp 13,260.67         |
| 20-Jan-15 |       |     | 0      | 18.81             |               |                | Rp 13,260.67 | Rp 13,260.67         |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 1.48   | 37.08             |               |                | Rp 26,140.66 | Rp 26,140.66         |
| 19-Dec-15 |       | 3.3 | 0      | 40.38             |               |                | Rp 28,467.09 | Rp 28,467.09         |
| 20-Dec-15 |       |     | 0      | 40.38             |               |                | Rp 28,467.09 | Rp 28,467.09         |
| 21-Dec-15 |       |     | 0      | 40.38             |               |                | Rp 28,467.09 | Rp 28,467.09         |
| 22-Dec-15 |       |     | 0.28   | 40.1              |               |                | Rp 28,269.70 | Rp 28,269.70         |
| 23-Dec-15 |       |     | 0      | 40.1              |               |                | Rp 28,269.70 | Rp 28,269.70         |



Table 4. 37 Replication 1 of AC 360 Gr 79 x 109 Existing Inventory Control System (continued)

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 24-Dec-15 |       |    | 0      | 40.1              |            |                | Rp 28,269.70 | Rp 28,269.70         |
| 25-Dec-15 |       |    | 0      | 40.1              |            |                | Rp 28,269.70 | Rp 28,269.70         |
| 26-Dec-15 |       |    | 0      | 40.1              |            |                | Rp 28,269.70 | Rp 28,269.70         |
| 27-Dec-15 |       |    | 0      | 40.1              |            |                | Rp 28,269.70 | Rp 28,269.70         |
| 28-Dec-15 |       |    | 0      | 40.1              |            |                | Rp 28,269.70 | Rp 28,269.70         |
| 29-Dec-15 |       |    | 0.55   | 39.55             |            |                | Rp 27,881.96 | Rp 27,881.96         |
| 30-Dec-15 |       |    | 0      | 39.55             |            |                | Rp 27,881.96 | Rp 27,881.96         |
| 31-Dec-15 |       |    | 0      | 39.55             |            |                | Rp 27,881.96 | Rp 27,881.96         |
|           |       |    |        |                   |            |                |              | Rp 9,295,993.25      |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.38 recapitulates the output of existing inventory control system for AC 360 Gr 79 x 109.

Table 4. 38 Recapitulation of AC 360 Gr 79 x 109 Existing Inventory Control System

|               | Total Customer Order | Existing         |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 22                   | 0                | 100.00%       | Rp 9,295,993.25 |
| Replication 2 | 35                   | 0                | 100.00%       | Rp 8,342,275.15 |
|               |                      |                  |               | Rp 8,819,134.20 |

#### 4.3.2.5 AC 230 Gr 79 x 109

Raw material type AC 230 Gr 79 x 109 represents raw materials in C class with high CV. Table 4.39 shows the calculation exemplification of the first replication.

Table 4. 39 Replication 1 of AC 230 Gr 79 x 109 Existing Inventory Control System

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 1-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 2-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 3-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 4-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 5-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 6-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 7-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 8-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 9-Jan-15  |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 10-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 11-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 12-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 13-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 14-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 15-Jan-15 | 3.5   |     | 0      | 9                 | Rp 131,774.28 |                | Rp 4,264.20  | Rp 136,038.48        |
| 16-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 17-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 18-Jan-15 |       |     | 0      | 9                 |               |                | Rp 4,264.20  | Rp 4,264.20          |
| 19-Jan-15 |       | 3.5 | 0      | 12.5              |               |                | Rp 5,922.50  | Rp 5,922.50          |
| 20-Jan-15 |       |     | 0      | 12.5              |               |                | Rp 5,922.50  | Rp 5,922.50          |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |



Table 4. 39 Replication 1 of AC 230 Gr 79 x 109 Existing Inventory Control System (continued)

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0.59   | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 19-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 20-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 21-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 22-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 23-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 24-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 25-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 26-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 27-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 28-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 29-Dec-15 |       |     | 0      | 16.41             |            |                | Rp 7,775.06  | Rp 7,775.06          |
| 30-Dec-15 |       |     | 0.32   | 16.09             |            |                | Rp 7,623.44  | Rp 7,623.44          |
| 31-Dec-15 |       |     | 0      | 16.09             |            |                | Rp 7,623.44  | Rp 7,623.44          |
|           |       |     |        |                   |            |                |              | Rp 2,942,856.44      |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.40 recapitulates the output of existing inventory control system for AC 230 Gr 79 x 109.

Table 4. 40 Recapitulation of AC 230 Gr 79 x 109 Existing Inventory Control System

|               | Total Customer Order | Existing         |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 9                    | 0                | 100.00%       | Rp 2,942,856.44 |
| Replication 2 | 7                    | 0                | 100.00%       | Rp 3,077,041.34 |
| Replication 3 | 15                   | 0                | 100.00%       | Rp 2,837,857.62 |
| Replication 4 | 4                    | 0                | 100.00%       | Rp 3,295,851.66 |
| Replication 5 | 5                    | 0                | 100.00%       | Rp 3,410,203.29 |
| Replication 6 | 11                   | 0                | 100.00%       | Rp 2,491,130.78 |
| Replication 7 | 8                    | 0                | 100.00%       | Rp 2,634,502.66 |
| Replication 8 | 5                    | 0                | 100.00%       | Rp 3,291,975.97 |
|               |                      |                  |               | Rp 2,997,677.47 |

#### 4.3.2.6 Bontak Sticker 54 x 70

Raw material type Bontak Sticker 54 x 70 represents raw materials in C class with low CV. Table 4.41 shows the calculation exemplification of the first replication.

Table 4. 41 Replication 1 of Bontak Sticker 54 x 70 Existing Inventory Control System

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 1-Jan-15  |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 2-Jan-15  |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 3-Jan-15  |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 4-Jan-15  |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 5-Jan-15  |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 6-Jan-15  |       |    | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |



Table 4. 41 Replication 1 of Bontak Sticker 54 x 70 Existing Inventory Control System (cont'd)

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|---------------|----------------|--------------|----------------------|
| 7-Jan-15  |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 8-Jan-15  |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 9-Jan-15  |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 10-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 11-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 12-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 13-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 14-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 15-Jan-15 | 1     |     | 0      | 2.57              | Rp 131,774.28 |                | Rp 874.73    | Rp 132,649.01        |
| 16-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 17-Jan-15 |       |     | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 18-Jan-15 |       | 1   | 0      | 3.57              |               |                | Rp 1,215.09  | Rp 1,215.09          |
| 19-Jan-15 |       |     | 0      | 3.57              |               |                | Rp 1,215.09  | Rp 1,215.09          |
| 20-Jan-15 |       |     | 0.55   | 3.02              |               |                | Rp 1,027.89  | Rp 1,027.89          |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 19-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 20-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 21-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 22-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 23-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 24-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 25-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 26-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 27-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 28-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 29-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 30-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
| 31-Dec-15 |       |     | 0      | 0.76              |               |                | Rp 258.67    | Rp 258.67            |
|           |       |     |        |                   |               |                | Rp           | 5,740,382.02         |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.42 recapitulates the replication outputs of existing inventory control system for Bontak Sticker 54 x 70.

Table 4. 42 Recapitulation of AC 230 Gr 79 x 109 Existing Inventory Control System

|               | Total Customer Order | Existing         |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 24                   | 3                | 87.50%        | Rp 5,740,382.02 |
| Replication 2 | 13                   | 2                | 84.62%        | Rp 4,088,833.57 |
| Replication 3 | 19                   | 1                | 94.74%        | Rp 2,410,526.03 |
| Replication 4 | 12                   | 0                | 100.00%       | Rp 941,005.51   |
| Replication 5 | 14                   | 0                | 100.00%       | Rp 927,258.37   |
| Replication 6 | 24                   | 3                | 87.50%        | Rp 5,829,685.68 |
|               |                      |                  |               | Rp 3,322,948.53 |

#### 4.3.3 Continuous Review (s, Q System)

Continuous review (s, Q system) is the first alternative of inventory control system. Unlike the existing inventory control system, continuous review gives time flexibility to the company for ordering raw materials from suppliers.



Using the formula that has been stated in subchapter 2.5.1, parameters in continuous review for each sample are recapitulated in Table 4.43.

Table 4. 43 Parameters in Continuous Review for All Samples

| Raw Material           | SS    | DL   | ROP   | Q*    |
|------------------------|-------|------|-------|-------|
| AC 260 Gr 79 x 109     | 5.43  | 1.12 | 6.55  | 11.63 |
| DC 400 Gr 79 x 109     | 16.09 | 9.54 | 25.63 | 32.30 |
| DC 250 Gr 89 x 120     | 3.12  | 0.50 | 3.61  | 9.56  |
| AC 360 Gr 79 x109      | 0.94  | 0.25 | 1.19  | 4.77  |
| AC 230 Gr 79 x 109     | 0.44  | 0.05 | 0.49  | 3.25  |
| Bontak Sticker 54 x 70 | 0.38  | 0.06 | 0.43  | 4.47  |

Appendix D and E deliberates data for continuous review inventory control system; Appendix D presents complete calculation replications for raw material AC 260 Gr 79 x 109, while Appendix E consists the lead time for the same raw material type. Other continuous review inventory control system calculations for the rest of raw materials types follow the logic presented in Appendix D and Appendix E.

#### 4.3.3.1 AC 260 Gr 79 x 109

A continuous review calculation example of the first replication for AC 260 Gr 79 x 109 is presented in Table 4.44.

Table 4. 44 Replication 1 of AC 260 Gr 79 x 109 Continuous Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |     | 9.84   | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 10-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 11-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 12-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 13-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 14-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 15-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 16-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 17-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 18-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 19-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 20-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0.34   | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |



Table 4. 44 Replication 1 of AC 260 Gr 79 x 109 Continuous Review (continued)

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 19-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 20-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 21-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 22-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 23-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 24-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 25-Dec-15 |       |    | 0      | 13.66             |            |                | Rp 10,464.52 | Rp 10,464.52         |
| 26-Dec-15 |       |    | 0.14   | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 27-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 28-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 29-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 30-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 31-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
|           |       |    |        |                   |            |                |              | Rp 8,528,989.38      |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.45 recapitulates the outputs of continuous review inventory control system for AC 260 Gr 79 x 109.

Table 4. 45 Recapitulation of AC 260 Gr 79 x 109 Continuous Review

|               | Total Customer Order | s, Q System      |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 33                   | 0                | 100.00%       | Rp 8,528,989.38  |
| Replication 2 | 39                   | 0                | 100.00%       | Rp 12,334,659.10 |
| Replication 3 | 41                   | 1                | 97.56%        | Rp 10,620,771.33 |
| Replication 4 | 48                   | 3                | 93.75%        | Rp 14,194,533.42 |
| Replication 5 | 48                   | 0                | 100.00%       | Rp 7,070,757.31  |
| Replication 6 | 48                   | 5                | 89.58%        | Rp 17,473,774.67 |
| Replication 7 | 43                   | 2                | 95.35%        | Rp 12,410,818.78 |
|               |                      |                  |               | Rp 11,804,900.57 |

#### 4.3.3.2 DC 400 Gr 79 x 109

A continuous review calculation example of the first replication for DC 400 Gr 79 x 109 is presented in Table 4.46.

Table 4. 46 Replication 1 of DC 400 Gr 79 x 109 Continuous Review

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 1-Jan-15  |       |    | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 2-Jan-15  |       |    | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 3-Jan-15  |       |    | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 4-Jan-15  |       |    | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 5-Jan-15  |       |    | 6.84   | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 6-Jan-15  |       |    | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 7-Jan-15  |       |    | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 8-Jan-15  |       |    | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 9-Jan-15  |       |    | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 10-Jan-15 |       |    | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 11-Jan-15 |       |    | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |



Table 4. 46 Replication 1 of DC 400 Gr 79 x 109 Continuous Review (continued)

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|---------------|----------------|--------------|----------------------|
| 12-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 13-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 14-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 15-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 16-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 17-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 18-Jan-15 |       |     | 0      | 61.67             |               |                | Rp 25,406.19 | Rp 25,406.19         |
| 19-Jan-15 |       |     | 1.49   | 60.18             |               |                | Rp 24,792.35 | Rp 24,792.35         |
| 20-Jan-15 |       |     | 1.71   | 58.47             |               |                | Rp 24,087.89 | Rp 24,087.89         |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0      | 34.41             |               |                | Rp 14,175.89 | Rp 14,175.89         |
| 19-Dec-15 |       |     | 0      | 34.41             |               |                | Rp 14,175.89 | Rp 14,175.89         |
| 20-Dec-15 |       |     | 0      | 34.41             |               |                | Rp 14,175.89 | Rp 14,175.89         |
| 21-Dec-15 | 32.3  |     | 17.35  | 17.06             | Rp 131,774.28 |                | Rp 7,028.21  | Rp 138,802.49        |
| 22-Dec-15 |       |     | 4.94   | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 23-Dec-15 |       |     | 0      | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 24-Dec-15 |       |     | 0      | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 25-Dec-15 |       |     | 0      | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 26-Dec-15 |       |     | 0      | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 27-Dec-15 |       |     | 0      | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 28-Dec-15 |       |     | 0      | 12.12             |               |                | Rp 4,993.08  | Rp 4,993.08          |
| 29-Dec-15 | 32.3  |     | 0      | 44.42             |               |                | Rp 18,299.71 | Rp 18,299.71         |
| 30-Dec-15 |       |     | 0      | 44.42             |               |                | Rp 18,299.71 | Rp 18,299.71         |
| 31-Dec-15 |       |     | 0.13   | 44.29             |               |                | Rp 18,246.15 | Rp 18,246.15         |
|           |       |     |        |                   |               |                | Rp           | 10,861,071.08        |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.47 recapitulates the output of continuous review inventory control system for DC 400 Gr 79 x 109.

Table 4. 47 Recapitulation of DC 400 Gr 79 x 109 Continuous Review

|               | Total Customer Order | s, Q System      |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 75                   | 2                | 97.33%        | Rp 10,861,071.08 |
| Replication 2 | 86                   | 2                | 97.67%        | Rp 10,246,506.05 |
| Replication 3 | 86                   | 0                | 100.00%       | Rp 7,263,665.71  |
| Replication 4 | 100                  | 1                | 99.00%        | Rp 9,304,573.84  |
| Replication 5 | 87                   | 2                | 97.70%        | Rp 10,337,659.08 |
| Replication 6 | 84                   | 1                | 98.81%        | Rp 8,558,375.61  |
| Replication 7 | 88                   | 0                | 100.00%       | Rp 6,991,435.93  |
|               |                      |                  |               | Rp 9,080,469.61  |

#### 4.3.3.3 DC 250 Gr 89 x 120

A continuous review calculation example of the first replication for DC 250 Gr 89 x 120 is presented in Table 4.48.



Table 4. 48 Replication 1 of DC 250 Gr 89 x 120 Continuous Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 1-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 2-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 3-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 4-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 5-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 6-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 7-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 8-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 9-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 10-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 11-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 12-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 13-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 14-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 15-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 16-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 17-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 18-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 19-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 20-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 19-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 20-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 21-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 22-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 23-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 24-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 25-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 26-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 27-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 28-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 29-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 30-Dec-15 |       |     | 0      | 5.03              |            |                | Rp 1,684.85  | Rp 1,684.85          |
| 31-Dec-15 |       |     | 1.29   | 3.74              |            |                | Rp 1,252.75  | Rp 1,252.75          |
|           |       |     |        |                   |            |                | Rp           | 4,155,026.13         |

After doing all replication, total cost as well as the service level for each replication could be interfered. Table 4.49 recapitulates the output of continuous review inventory control system for DC 250 Gr 89 x 120.

Table 4. 49 Recapitulation of DC 250 Gr 89 x 120 Continuous Review

|               | Total Customer Order | s, Q System      |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 15                   | 1                | 93.33%        | Rp 4,155,026.13 |
| Replication 2 | 26                   | 1                | 96.15%        | Rp 4,297,299.08 |
| Replication 3 | 21                   | 1                | 95.24%        | Rp 4,450,248.81 |
| Replication 4 | 20                   | 0                | 100.00%       | Rp 4,308,647.42 |
| Replication 5 | 22                   | 3                | 86.36%        | Rp 6,885,030.31 |
| Replication 6 | 18                   | 0                | 100.00%       | Rp 3,997,791.14 |
| Replication 7 | 16                   | 0                | 100.00%       | Rp 3,181,507.02 |
| Replication 8 | 23                   | 3                | 86.96%        | Rp 6,500,183.40 |
|               |                      |                  |               | Rp 4,721,966.66 |



#### 4.3.3.4 AC 360 Gr 79 x109

A continuous review calculation example of the first replication for AC 360 Gr 79 x 109 is presented in Table 4.50.

Table 4. 50 Replication 1 of AC 360 Gr 79 x 109 Continuous Review

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 1-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 2-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 3-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 4-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 5-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 6-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 7-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 8-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 9-Jan-15  |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 10-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 11-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 12-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 13-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 14-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 15-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 16-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 17-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 18-Jan-15 |       |      | 0      | 15.68             |               |                | Rp 11,054.09 | Rp 11,054.09         |
| 19-Jan-15 |       |      | 0.17   | 15.51             |               |                | Rp 10,934.24 | Rp 10,934.24         |
| 20-Jan-15 |       |      | 0      | 15.51             |               |                | Rp 10,934.24 | Rp 10,934.24         |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 | 4.77  |      | 1.48   | 0.78              | Rp 131,774.28 |                | Rp 549.88    | Rp 132,324.16        |
| 19-Dec-15 |       |      | 0      | 0.78              |               |                | Rp 549.88    | Rp 549.88            |
| 20-Dec-15 |       |      | 0      | 0.78              |               |                | Rp 549.88    | Rp 549.88            |
| 21-Dec-15 |       |      | 0      | 0.78              |               |                | Rp 549.88    | Rp 549.88            |
| 22-Dec-15 |       |      | 0.28   | 0.5               |               |                | Rp 352.49    | Rp 352.49            |
| 23-Dec-15 |       | 4.77 | 0      | 5.27              |               |                | Rp 3,715.24  | Rp 3,715.24          |
| 24-Dec-15 |       |      | 0      | 5.27              |               |                | Rp 3,715.24  | Rp 3,715.24          |
| 25-Dec-15 |       |      | 0      | 5.27              |               |                | Rp 3,715.24  | Rp 3,715.24          |
| 26-Dec-15 |       |      | 0      | 5.27              |               |                | Rp 3,715.24  | Rp 3,715.24          |
| 27-Dec-15 |       |      | 0      | 5.27              |               |                | Rp 3,715.24  | Rp 3,715.24          |
| 28-Dec-15 |       |      | 0      | 5.27              |               |                | Rp 3,715.24  | Rp 3,715.24          |
| 29-Dec-15 |       |      | 0.55   | 4.72              |               |                | Rp 3,327.51  | Rp 3,327.51          |
| 30-Dec-15 |       |      | 0      | 4.72              |               |                | Rp 3,327.51  | Rp 3,327.51          |
| 31-Dec-15 |       |      | 0      | 4.72              |               |                | Rp 3,327.51  | Rp 3,327.51          |
|           |       |      |        |                   |               |                |              | Rp 2,816,747.01      |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.51 recapitulates the output of continuous review inventory control system for AC 360 Gr 79 x 109.

Table 4. 51 Recapitulation of AC 360 Gr 79 x 109 Continuous Review

|               | Total Customer Order | s, Q System      |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 22                   | 0                | 100.00%       | Rp 2,816,747.01 |
| Replication 2 | 35                   | 0                | 100.00%       | Rp 2,475,655.95 |
|               |                      |                  |               | Rp 2,646,201.48 |



#### 4.3.3.5 AC 230 Gr 79 x 109

A continuous review calculation example of the first replication for AC 230 Gr 79 x 109 is presented in Table 4.52.

Table 4. 52 Replication 1 of AC 230 Gr 79 x 109 Continuous Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 1-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 2-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 3-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 4-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 5-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 6-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 7-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 8-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 9-Jan-15  |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 10-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 11-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 12-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 13-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 14-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 15-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 16-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 17-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 18-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 19-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| 20-Jan-15 |       |     | 0      | 9                 |            |                | Rp 4,264.20  | Rp 4,264.20          |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0.59   | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 19-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 20-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 21-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 22-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 23-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 24-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 25-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 26-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 27-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 28-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 29-Dec-15 |       |     | 0      | 2.41              |            |                | Rp 1,141.86  | Rp 1,141.86          |
| 30-Dec-15 |       |     | 0.32   | 2.09              |            |                | Rp 990.24    | Rp 990.24            |
| 31-Dec-15 |       |     | 0      | 2.09              |            |                | Rp 990.24    | Rp 990.24            |
|           |       |     |        |                   |            |                | Rp           | 1,007,862.62         |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.53 recapitulates the output of continuous review inventory control system for AC 230 Gr 79 x 109.

Table 4. 53 Recapitulation of AC 230 Gr 79 x 109 Continuous Review

|               | Total Customer Order | s, Q System      |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 9                    | 0                | 100.00%       | Rp 1,007,862.62 |
| Replication 2 | 7                    | 0                | 100.00%       | Rp 1,147,022.42 |
| Replication 3 | 15                   | 0                | 100.00%       | Rp 901,205.50   |
| Replication 4 | 4                    | 0                | 100.00%       | Rp 1,365,832.74 |
| Replication 5 | 5                    | 0                | 100.00%       | Rp 1,476,867.77 |



Table 4. 53 Recapitulation of AC 230 Gr 79 x 109 Continuous Review (continued)

|               | Total Customer Order | s, Q System      |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 6 | 11                   | 1                | 90.91%        | Rp 2,380,662.51 |
| Replication 7 | 8                    | 0                | 100.00%       | Rp 895,956.82   |
| Replication 8 | 5                    | 0                | 100.00%       | Rp 1,356,982.15 |
|               |                      |                  |               | Rp 1,316,549.07 |

#### 4.3.3.6 Bontak Sticker 54 x 70

A continuous review calculation example of the first replication for Bontak Sticker 54 x 70 is presented in Table 4.54.

Table 4. 54 Replication 1 of Bontak Sticker 54 x 70 Continuous Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 1-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 2-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 3-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 4-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 5-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 6-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 7-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 8-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 9-Jan-15  |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 10-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 11-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 12-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 13-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 14-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 15-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 16-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 17-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 18-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 19-Jan-15 |       |     | 0      | 2.57              |            |                | Rp 874.73    | Rp 874.73            |
| 20-Jan-15 |       |     | 0.55   | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 19-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 20-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 21-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 22-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 23-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 24-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 25-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 26-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 27-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 28-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 29-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 30-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
| 31-Dec-15 |       |     | 0      | 2.02              |            |                | Rp 687.53    | Rp 687.53            |
|           |       |     |        |                   |            |                |              | Rp 3,649,256.62      |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.55 recapitulates the replication outputs of continuous review inventory control system for Bontak Sticker 54 x 70.



Table 4. 55 Recapitulation of Bontak Sticker 54 x 70 Continuous Review

|               | Total Customer Order | s, Q System      |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 24                   | 2                | 91.67%        | Rp 3,649,256.62 |
| Replication 2 | 13                   | 0                | 100.00%       | Rp 526,200.97   |
| Replication 3 | 19                   | 0                | 100.00%       | Rp 633,189.73   |
| Replication 4 | 12                   | 0                | 100.00%       | Rp 393,303.50   |
| Replication 5 | 14                   | 0                | 100.00%       | Rp 533,719.02   |
| Replication 6 | 24                   | 2                | 91.67%        | Rp 3,627,191.09 |
|               |                      |                  |               | Rp 1,560,476.82 |

#### 4.3.4 Periodic Review (R, s, S System)

Other than continuous review, there is another alternative of inventory control system, which is periodic review (R, s, S system). Different from continuous review, periodic review restrict the period for company to order raw materials from suppliers. Company could place an order only during specified time and when inventory on hand is less than s. Using the formula that has been stated in subchapter 2.5.2, parameters in periodic review for each sample are recapitulated in Table 4.56.

Table 4. 56 Parameters in Periodic Review for All Samples

| Raw Material           | T* (years) | T* (days) | SS    | D <sub>T+L</sub> | OUL   |
|------------------------|------------|-----------|-------|------------------|-------|
| AC 260 Gr 79 x 109     | 0.0810     | 29.58     | 17.98 | 12.75            | 30.73 |
| DC 400 Gr 79 x 109     | 0.0543     | 19.81     | 32.58 | 41.84            | 74.42 |
| DC 250 Gr 89 x 120     | 0.2254     | 82.26     | 13.95 | 10.06            | 24.01 |
| AC 360 Gr 79 x 109     | 0.2147     | 78.36     | 4.16  | 5.02             | 9.18  |
| AC 230 Gr 79 x 109     | 0.4683     | 170.92    | 3.47  | 3.31             | 6.78  |
| Bontak Sticker 54 x 70 | 0.4743     | 173.12    | 3.33  | 4.53             | 7.86  |

Appendix F and G deliberates data for periodic review inventory control system; Appendix F presents complete calculation replications for raw material AC 260 Gr 79 x 109, while Appendix G consists the lead time for the same raw material type. Other periodic review inventory control system calculations for the rest of raw materials types follow the logic presented in Appendix F and Appendix G.



#### 4.3.4.1 AC 260 Gr 79 x 109

Table 4.57 exhibits the calculation example of AC 260 Gr 79 x 109 periodic review inventory control system for the first replication.

Table 4. 57 Replication 1 of AC 260 Gr 79 x 109 Periodic Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |     | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |     | 9.84   | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 10-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 11-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 12-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 13-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 14-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 15-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 16-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 17-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 18-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 19-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 20-Jan-15 |       |     | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0.34   | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 19-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 20-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 21-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 22-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 23-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 24-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 25-Dec-15 |       |     | 0      | 20.65             |            |                | Rp 15,819.35 | Rp 15,819.35         |
| 26-Dec-15 |       |     | 0.14   | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 27-Dec-15 |       |     | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 28-Dec-15 |       |     | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 29-Dec-15 |       |     | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 30-Dec-15 |       |     | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 31-Dec-15 |       |     | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
|           |       |     |        |                   |            |                | Rp           | 9,648,031.21         |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.58 recapitulates the replication outputs of periodic review inventory control system for AC 260 Gr 79 x 109.

Table 4. 58 Recapitulation of AC 260 Gr 79 x 109 Periodic Review

|               | Total Customer Order | R, s, S System   |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 33                   | 0                | 100.00%       | Rp 9,648,031.21  |
| Replication 2 | 39                   | 0                | 100.00%       | Rp 13,322,230.58 |
| Replication 3 | 41                   | 0                | 100.00%       | Rp 10,788,318.74 |
| Replication 4 | 48                   | 3                | 93.75%        | Rp 14,920,754.96 |



Table 4. 58 Recapitulation of AC 260 Gr 79 x 109 Periodic Review (continued)

|               | Total Customer Order | R, s, S System   |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 5 | 48                   | 0                | 100.00%       | Rp 8,580,173.09  |
| Replication 6 | 48                   | 2                | 95.83%        | Rp 13,910,822.15 |
| Replication 7 | 43                   | 1                | 97.67%        | Rp 12,480,500.76 |
|               |                      |                  |               | Rp 11,950,118.79 |

#### 4.3.4.2 DC 400 Gr 79 x 109

Table 4.59 exhibits the calculation example of DC 400 Gr 79 x 109 periodic review inventory control system for the first replication.

Table 4. 59 Replication 1 of DC 400 Gr 79 x 109 Periodic Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 1-Jan-15  |       |     | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 2-Jan-15  |       |     | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 3-Jan-15  |       |     | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 4-Jan-15  |       |     | 0      | 68.51             |            |                | Rp 28,224.06 | Rp 28,224.06         |
| 5-Jan-15  |       |     | 6.84   | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 6-Jan-15  |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 7-Jan-15  |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 8-Jan-15  |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 9-Jan-15  |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 10-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 11-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 12-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 13-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 14-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 15-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 16-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 17-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 18-Jan-15 |       |     | 0      | 61.67             |            |                | Rp 25,406.19 | Rp 25,406.19         |
| 19-Jan-15 |       |     | 1.49   | 60.18             |            |                | Rp 24,792.35 | Rp 24,792.35         |
| 20-Jan-15 |       |     | 1.71   | 58.47             |            |                | Rp 24,087.89 | Rp 24,087.89         |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0      | 56.08             |            |                | Rp 23,103.28 | Rp 23,103.28         |
| 19-Dec-15 |       |     | 0      | 56.08             |            |                | Rp 23,103.28 | Rp 23,103.28         |
| 20-Dec-15 |       |     | 0      | 56.08             |            |                | Rp 23,103.28 | Rp 23,103.28         |
| 21-Dec-15 |       |     | 17.35  | 38.73             |            |                | Rp 15,955.60 | Rp 15,955.60         |
| 22-Dec-15 |       |     | 4.94   | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 23-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 24-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 25-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 26-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 27-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 28-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 29-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 30-Dec-15 |       |     | 0      | 33.79             |            |                | Rp 13,920.47 | Rp 13,920.47         |
| 31-Dec-15 |       |     | 0.13   | 33.66             |            |                | Rp 13,866.91 | Rp 13,866.91         |
|           |       |     |        |                   |            |                |              | Rp 14,741,683.56     |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.60 recapitulates the replication outputs of periodic review inventory control system for DC 400 Gr 79 x 109.



Table 4. 60 Recapitulation of DC 400 Gr 79 x 109 Periodic Review

|               | Total Customer Order | R, s, S System   |               |                  |
|---------------|----------------------|------------------|---------------|------------------|
|               |                      | Total Lost Order | Service Level | Total Cost       |
| Replication 1 | 75                   | 5                | 93.33%        | Rp 14,741,683.56 |
| Replication 2 | 86                   | 3                | 96.51%        | Rp 11,986,081.20 |
| Replication 3 | 86                   | 2                | 97.67%        | Rp 10,446,324.32 |
| Replication 4 | 100                  | 12               | 88.00%        | Rp 25,326,293.05 |
| Replication 5 | 87                   | 6                | 93.10%        | Rp 16,561,956.49 |
| Replication 6 | 84                   | 3                | 96.43%        | Rp 11,673,415.02 |
| Replication 7 | 88                   | 7                | 92.05%        | Rp 17,928,791.54 |
|               |                      |                  |               | Rp 15,523,506.45 |

#### 4.3.4.3 DC 250 Gr 89 x 120

Table 4.61 exhibits the calculation example of DC 250 Gr 89 x 120 periodic review inventory control system for the first replication.

Table 4. 61 Replication 1 of DC 250 Gr 89 x 120 Periodic Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 1-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 2-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 3-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 4-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 5-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 6-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 7-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 8-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 9-Jan-15  |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 10-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 11-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 12-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 13-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 14-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 15-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 16-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 17-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 18-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 19-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| 20-Jan-15 |       |     | 0      | 43.51             |            |                | Rp 14,574.11 | Rp 14,574.11         |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 19-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 20-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 21-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 22-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 23-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 24-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 25-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 26-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 27-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 28-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 29-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 30-Dec-15 |       |     | 0      | 24.01             |            |                | Rp 8,042.39  | Rp 8,042.39          |
| 31-Dec-15 |       |     | 1.29   | 22.72             |            |                | Rp 7,610.29  | Rp 7,610.29          |
|           |       |     |        |                   |            |                |              | Rp 3,265,610.81      |



After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.62 recapitulates the replication outputs of periodic review inventory control system for DC 250 Gr 89 x 120.

Table 4. 62 Recapitulation of DC 250 Gr 89 x 120 Periodic Review

|               | Total Customer Order | R, s, S System   |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 15                   | 0                | 100.00%       | Rp 3,265,610.81 |
| Replication 2 | 26                   | 1                | 96.15%        | Rp 4,879,285.38 |
| Replication 3 | 21                   | 0                | 100.00%       | Rp 3,064,104.56 |
| Replication 4 | 20                   | 0                | 100.00%       | Rp 4,308,647.42 |
| Replication 5 | 22                   | 0                | 100.00%       | Rp 3,183,101.13 |
| Replication 6 | 18                   | 0                | 100.00%       | Rp 3,997,791.14 |
| Replication 7 | 16                   | 0                | 100.00%       | Rp 3,181,507.02 |
| Replication 8 | 23                   | 0                | 100.00%       | Rp 2,242,413.88 |
|               |                      |                  |               | Rp 3,515,307.67 |

#### 4.3.4.4 AC 360 Gr 79 x109

Table 4.63 exhibits the calculation example of AC 360 Gr 79 x 109 periodic review inventory control system for the first replication.

Table 4. 63 Replication 1 of AC 360 Gr 79 x 109 Periodic Review

| Date      | Order | In  | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 1-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 2-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 3-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 4-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 5-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 6-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 7-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 8-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 9-Jan-15  |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 10-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 11-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 12-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 13-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 14-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 15-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 16-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 17-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 18-Jan-15 |       |     | 0      | 15.68             |            |                | Rp 11,054.09 | Rp 11,054.09         |
| 19-Jan-15 |       |     | 0.17   | 15.51             |            |                | Rp 10,934.24 | Rp 10,934.24         |
| 20-Jan-15 |       |     | 0      | 15.51             |            |                | Rp 10,934.24 | Rp 10,934.24         |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| ...       | ...   | ... | ...    | ...               | ...        | ...            | ...          | ...                  |
| 18-Dec-15 |       |     | 1.48   | 0.78              |            |                | Rp 549.88    | Rp 549.88            |
| 19-Dec-15 |       |     | 0      | 0.78              |            |                | Rp 549.88    | Rp 549.88            |
| 20-Dec-15 |       |     | 0      | 0.78              |            |                | Rp 549.88    | Rp 549.88            |
| 21-Dec-15 |       |     | 0      | 0.78              |            |                | Rp 549.88    | Rp 549.88            |
| 22-Dec-15 |       |     | 0.28   | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 23-Dec-15 |       |     | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 24-Dec-15 |       |     | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 25-Dec-15 |       |     | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 26-Dec-15 |       |     | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |



Table 4. 63 Replication 1 of AC 360 Gr 79 x 109 Periodic Review (continued)

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 27-Dec-15 |       |    | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 28-Dec-15 |       |    | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 29-Dec-15 |       |    | 0.55   | -0.05             |            | Rp1,556,301.60 | Rp 352.49    | Rp 1,556,654.09      |
| 30-Dec-15 |       |    | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
| 31-Dec-15 |       |    | 0      | 0.5               |            |                | Rp 352.49    | Rp 352.49            |
|           |       |    |        |                   |            |                |              | Rp 4,212,172.75      |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.64 recapitulates the replication outputs of periodic review inventory control system for AC 230 Gr 79 x 109.

Table 4. 64 Recapitulation of AC 230 Gr 79 x 109 Periodic Review

|               | Total Customer Order | R, s, S System   |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 9                    | 0                | 100.00%       | Rp 1,154,130.44 |
| Replication 2 | 7                    | 0                | 100.00%       | Rp 1,293,986.73 |
| Replication 3 | 15                   | 0                | 100.00%       | Rp 1,047,193.78 |
| Replication 4 | 4                    | 0                | 100.00%       | Rp 1,365,832.74 |
| Replication 5 | 5                    | 0                | 100.00%       | Rp 1,476,867.77 |
| Replication 6 | 11                   | 0                | 100.00%       | Rp 1,197,280.43 |
| Replication 7 | 8                    | 0                | 100.00%       | Rp 1,132,349.86 |
| Replication 8 | 5                    | 0                | 100.00%       | Rp 1,356,982.15 |
|               |                      |                  |               | Rp 1,253,077.99 |

#### 4.3.4.5 Bontak Sticker 54 x 70

Table 4.65 exhibits the calculation example of Bontak Sticker 54 x 70 periodic review inventory control system for the first replication.

Table 4. 65 Replication 1 of Bontak Sticker 54 x 70 Periodic Review

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 1-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 2-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 3-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 4-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 5-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 6-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 7-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 8-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 9-Jan-15  |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 10-Jan-15 |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 11-Jan-15 |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 12-Jan-15 |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 13-Jan-15 |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 14-Jan-15 |       |      | 0      | 2.57              |               |                | Rp 874.73    | Rp 874.73            |
| 15-Jan-15 | 5.29  |      | 0      | 2.57              | Rp 131,774.28 |                | Rp 874.73    | Rp 132,649.01        |
| 16-Jan-15 |       | 5.29 | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |
| 17-Jan-15 |       |      | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |
| 18-Jan-15 |       |      | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |



Table 4. 65 Replication 1 of Bontak Sticker 54 x 70 Periodic Review (continued)

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 19-Jan-15 |       |      | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |
| 20-Jan-15 |       |      | 0.55   | 7.31              |               |                | Rp 2,488.03  | Rp 2,488.03          |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| ...       | ...   | ...  | ...    | ...               | ...           | ...            | ...          | ...                  |
| 18-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 19-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 20-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 21-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 22-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 23-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 24-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 25-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 26-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 27-Dec-15 | 6.03  |      | 0      | 1.83              | Rp 131,774.28 |                | Rp 622.86    | Rp 132,397.14        |
| 28-Dec-15 |       |      | 0      | 1.83              |               |                | Rp 622.86    | Rp 622.86            |
| 29-Dec-15 |       | 6.03 | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |
| 30-Dec-15 |       |      | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |
| 31-Dec-15 |       |      | 0      | 7.86              |               |                | Rp 2,675.23  | Rp 2,675.23          |
|           |       |      |        |                   |               |                | Rp           | 954,874.68           |

After doing all replications, total cost as well as the service level for each replication could be interfered. Table 4.66 recapitulates the replication outputs of periodic review inventory control system for Bontak Sticker 54 x 70.

Table 4. 66 Recapitulation of Bontak Sticker 54 x 70 Periodic Review

|               | Total Customer Order | R, s, S System   |               |                 |
|---------------|----------------------|------------------|---------------|-----------------|
|               |                      | Total Lost Order | Service Level | Total Cost      |
| Replication 1 | 24                   | 0                | 100.00%       | Rp 954,874.68   |
| Replication 2 | 13                   | 0                | 100.00%       | Rp 907,873.87   |
| Replication 3 | 19                   | 0                | 100.00%       | Rp 849,478.30   |
| Replication 4 | 12                   | 0                | 100.00%       | Rp 1,023,660.93 |
| Replication 5 | 14                   | 0                | 100.00%       | Rp 887,642.36   |
| Replication 6 | 24                   | 5                | 79.17%        | Rp 8,492,187.49 |
|               |                      |                  |               | Rp 2,185,952.94 |

#### 4.3.5 Heuristic Method for Continuous Review (s, Q System)

Heuristic method is conducted in order to check and find better result, if possible. For continuous review heuristic, this study limits to iterate on seven different order sizes (Q), neglecting the reorder point (ROP) iteration. Also using replications to obtain each level result, Table 4.67 to 4.72 present the recapitulation of continuous review heuristic method output of the samples – AC 260 Gr 79 x 109, DC 400 Gr 79 x 109, DC 250 Gr 89 x 120, AC 360 Gr 79 x 109, AC 230 Gr 79 x 109, and Bontak Sticker 54 x 70 – respectively.



Table 4. 67 Recapitulation of AC 260 Gr 79 x 109 Continuous Review Heuristic Method

| Q     | ROP  | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|-------|------|-------------|------------------|--------------------|----------------------|------------------|---------|------------|
| 7.5   | 6.55 | 1           | Rp 9,722,452.16  | Rp 12,665,538.53   | 33                   | 1                | 96.97%  | 95.19%     |
|       |      | 2           | Rp 12,331,847.63 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 12,326,957.10 |                    | 41                   | 2                | 95.12%  |            |
|       |      | 4           | Rp 17,272,612.43 |                    | 48                   | 5                | 89.58%  |            |
|       |      | 5           | Rp 6,738,454.12  |                    | 48                   | 0                | 100.00% |            |
|       |      | 6           | Rp 16,464,166.26 |                    | 48                   | 4                | 91.67%  |            |
|       |      | 7           | Rp 13,802,280.02 |                    | 43                   | 3                | 93.02%  |            |
| 10    | 6.55 | 1           | Rp 9,784,110.56  | Rp 11,830,680.31   | 33                   | 1                | 96.97%  | 96.44%     |
|       |      | 2           | Rp 12,490,807.15 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 10,667,082.84 |                    | 41                   | 1                | 97.56%  |            |
|       |      | 4           | Rp 14,496,737.88 |                    | 48                   | 3                | 93.75%  |            |
|       |      | 5           | Rp 8,071,979.91  |                    | 48                   | 1                | 97.92%  |            |
|       |      | 6           | Rp 13,432,444.73 |                    | 48                   | 2                | 95.83%  |            |
|       |      | 7           | Rp 13,871,599.12 |                    | 43                   | 3                | 93.02%  |            |
| 11.63 | 6.55 | 1           | Rp 8,528,989.38  | Rp 11,804,900.57   | 33                   | 0                | 100.00% | 96.61%     |
|       |      | 2           | Rp 12,334,659.10 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 10,620,771.33 |                    | 41                   | 1                | 97.56%  |            |
|       |      | 4           | Rp 14,194,533.42 |                    | 48                   | 3                | 93.75%  |            |
|       |      | 5           | Rp 7,070,757.31  |                    | 48                   | 0                | 100.00% |            |
|       |      | 6           | Rp 17,473,774.67 |                    | 48                   | 5                | 89.58%  |            |
|       |      | 7           | Rp 12,410,818.78 |                    | 43                   | 2                | 95.35%  |            |
| 12.5  | 6.55 | 1           | Rp 8,831,395.51  | Rp 11,863,350.62   | 33                   | 0                | 100.00% | 96.61%     |
|       |      | 2           | Rp 12,364,405.60 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 10,794,301.50 |                    | 41                   | 1                | 97.56%  |            |
|       |      | 4           | Rp 17,309,087.52 |                    | 48                   | 5                | 89.58%  |            |
|       |      | 5           | Rp 7,993,830.53  |                    | 48                   | 1                | 97.92%  |            |
|       |      | 6           | Rp 13,228,550.04 |                    | 48                   | 2                | 95.83%  |            |
|       |      | 7           | Rp 12,521,883.61 |                    | 43                   | 2                | 95.35%  |            |
| 15    | 6.55 | 1           | Rp 10,154,112.13 | Rp 11,285,521.99   | 33                   | 1                | 96.97%  | 97.31%     |
|       |      | 2           | Rp 12,251,783.07 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 12,362,175.84 |                    | 41                   | 2                | 95.12%  |            |
|       |      | 4           | Rp 11,585,248.45 |                    | 48                   | 1                | 97.92%  |            |
|       |      | 5           | Rp 6,671,371.80  |                    | 48                   | 0                | 100.00% |            |
|       |      | 6           | Rp 13,416,609.99 |                    | 48                   | 2                | 95.83%  |            |
|       |      | 7           | Rp 12,557,352.65 |                    | 43                   | 2                | 95.35%  |            |
| 17.5  | 6.55 | 1           | Rp 8,820,277.25  | Rp 11,783,400.27   | 33                   | 0                | 100.00% | 96.85%     |
|       |      | 2           | Rp 12,347,541.82 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 12,539,965.37 |                    | 41                   | 2                | 95.12%  |            |
|       |      | 4           | Rp 14,378,630.21 |                    | 48                   | 3                | 93.75%  |            |
|       |      | 5           | Rp 7,414,832.49  |                    | 48                   | 0                | 100.00% |            |
|       |      | 6           | Rp 14,912,672.93 |                    | 48                   | 3                | 93.75%  |            |
|       |      | 7           | Rp 12,069,881.83 |                    | 43                   | 2                | 95.35%  |            |
| 20    | 6.55 | 1           | Rp 8,738,297.52  | Rp 11,231,332.80   | 33                   | 0                | 100.00% | 98.08%     |
|       |      | 2           | Rp 12,427,979.17 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 12,890,442.39 |                    | 41                   | 2                | 95.12%  |            |
|       |      | 4           | Rp 11,884,079.54 |                    | 48                   | 1                | 97.92%  |            |
|       |      | 5           | Rp 7,175,435.62  |                    | 48                   | 0                | 100.00% |            |
|       |      | 6           | Rp 13,763,629.46 |                    | 48                   | 2                | 95.83%  |            |
|       |      | 7           | Rp 11,739,465.93 |                    | 43                   | 1                | 97.67%  |            |
| 22.5  | 6.55 | 1           | Rp 9,201,769.87  | Rp 11,876,474.16   | 33                   | 0                | 100.00% | 96.85%     |
|       |      | 2           | Rp 12,539,059.32 |                    | 39                   | 0                | 100.00% |            |
|       |      | 3           | Rp 12,887,224.90 |                    | 41                   | 2                | 95.12%  |            |
|       |      | 4           | Rp 13,550,707.96 |                    | 48                   | 2                | 95.83%  |            |
|       |      | 5           | Rp 7,282,631.79  |                    | 48                   | 1                | 97.92%  |            |
|       |      | 6           | Rp 15,082,939.64 |                    | 48                   | 3                | 93.75%  |            |
|       |      | 7           | Rp 12,590,985.63 |                    | 43                   | 2                | 95.35%  |            |

Table 4. 68 Recapitulation of DC 400 Gr 79 x 109 Continuous Review Heuristic Method

| Q    | ROP   | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|------|-------|-------------|------------------|--------------------|----------------------|------------------|---------|------------|
| 27.5 | 25.63 | 1           | Rp 12,322,037.70 | Rp 11,322,997.37   | 75                   | 3                | 96.00%  | 96.95%     |
|      |       | 2           | Rp 11,833,977.85 |                    | 86                   | 3                | 96.51%  |            |
|      |       | 3           | Rp 11,682,514.51 |                    | 86                   | 3                | 96.51%  |            |
|      |       | 4           | Rp 9,100,315.54  |                    | 100                  | 1                | 99.00%  |            |
|      |       | 5           | Rp 13,549,080.52 |                    | 87                   | 4                | 95.40%  |            |
|      |       | 6           | Rp 13,409,640.48 |                    | 84                   | 4                | 95.24%  |            |
|      |       | 7           | Rp 7,363,415.00  |                    | 88                   | 0                | 100.00% |            |



Table 4. 68 Recapitulation of DC 400 Gr 79 x 109 Continuous Review Heuristic Method (cont'd)

| Q    | ROP   | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|------|-------|-------------|------------------|--------------------|----------------------|------------------|---------|------------|
| 30   | 25.63 | 1           | Rp 10,861,410.46 | Rp 10,073,851.53   | 75                   | 2                | 97.33%  | 97.86%     |
|      |       | 2           | Rp 10,147,265.59 |                    | 86                   | 2                | 97.67%  |            |
|      |       | 3           | Rp 9,947,807.75  |                    | 86                   | 2                | 97.67%  |            |
|      |       | 4           | Rp 12,078,967.71 |                    | 100                  | 3                | 97.00%  |            |
|      |       | 5           | Rp 11,779,605.04 |                    | 87                   | 3                | 96.55%  |            |
|      |       | 6           | Rp 8,873,839.07  |                    | 84                   | 1                | 98.81%  |            |
|      |       | 7           | Rp 6,828,065.11  |                    | 88                   | 0                | 100.00% |            |
| 32.3 | 25.63 | 1           | Rp 10,861,071.08 | Rp 9,080,469.61    | 75                   | 2                | 97.33%  | 98.65%     |
|      |       | 2           | Rp 10,246,506.05 |                    | 86                   | 2                | 97.67%  |            |
|      |       | 3           | Rp 7,263,665.71  |                    | 86                   | 0                | 100.00% |            |
|      |       | 4           | Rp 9,304,573.84  |                    | 100                  | 1                | 99.00%  |            |
|      |       | 5           | Rp 10,337,659.08 |                    | 87                   | 2                | 97.70%  |            |
|      |       | 6           | Rp 8,558,375.61  |                    | 84                   | 1                | 98.81%  |            |
|      |       | 7           | Rp 6,991,435.93  |                    | 88                   | 0                | 100.00% |            |
| 35   | 25.63 | 1           | Rp 12,237,725.93 | Rp 9,250,550.16    | 75                   | 2                | 97.33%  | 98.70%     |
|      |       | 2           | Rp 7,104,809.53  |                    | 86                   | 0                | 100.00% |            |
|      |       | 3           | Rp 8,725,511.83  |                    | 86                   | 1                | 98.84%  |            |
|      |       | 4           | Rp 12,029,518.40 |                    | 100                  | 3                | 97.00%  |            |
|      |       | 5           | Rp 10,252,614.56 |                    | 87                   | 2                | 97.70%  |            |
|      |       | 6           | Rp 7,398,445.27  |                    | 84                   | 0                | 100.00% |            |
|      |       | 7           | Rp 7,005,225.58  |                    | 88                   | 0                | 100.00% |            |
| 37.5 | 25.63 | 1           | Rp 10,634,820.73 | Rp 8,346,369.38    | 75                   | 2                | 97.33%  | 99.29%     |
|      |       | 2           | Rp 7,187,601.58  |                    | 86                   | 0                | 100.00% |            |
|      |       | 3           | Rp 10,692,611.88 |                    | 86                   | 2                | 97.67%  |            |
|      |       | 4           | Rp 7,718,387.39  |                    | 100                  | 0                | 100.00% |            |
|      |       | 5           | Rp 7,594,785.04  |                    | 87                   | 0                | 100.00% |            |
|      |       | 6           | Rp 7,429,399.14  |                    | 84                   | 0                | 100.00% |            |
|      |       | 7           | Rp 7,166,979.92  |                    | 88                   | 0                | 100.00% |            |
| 40   | 25.63 | 1           | Rp 10,834,663.26 | Rp 10,194,867.52   | 75                   | 2                | 97.33%  | 97.86%     |
|      |       | 2           | Rp 11,727,809.52 |                    | 86                   | 3                | 96.51%  |            |
|      |       | 3           | Rp 10,187,886.84 |                    | 86                   | 2                | 97.67%  |            |
|      |       | 4           | Rp 12,051,381.10 |                    | 100                  | 3                | 97.00%  |            |
|      |       | 5           | Rp 9,080,224.69  |                    | 87                   | 1                | 98.85%  |            |
|      |       | 6           | Rp 8,977,056.05  |                    | 84                   | 1                | 98.81%  |            |
|      |       | 7           | Rp 8,505,051.22  |                    | 88                   | 1                | 98.86%  |            |
| 42.5 | 25.63 | 1           | Rp 7,915,335.79  | Rp 8,153,223.49    | 75                   | 0                | 100.00% | 99.49%     |
|      |       | 2           | Rp 8,990,810.17  |                    | 86                   | 1                | 98.84%  |            |
|      |       | 3           | Rp 7,239,419.17  |                    | 86                   | 0                | 100.00% |            |
|      |       | 4           | Rp 7,333,674.33  |                    | 100                  | 0                | 100.00% |            |
|      |       | 5           | Rp 7,987,298.71  |                    | 87                   | 0                | 100.00% |            |
|      |       | 6           | Rp 10,391,613.70 |                    | 84                   | 2                | 97.62%  |            |
|      |       | 7           | Rp 7,214,412.59  |                    | 88                   | 0                | 100.00% |            |
| 45   | 25.63 | 1           | Rp 8,091,509.08  | Rp 9,257,419.96    | 75                   | 0                | 100.00% | 98.88%     |
|      |       | 2           | Rp 10,466,963.01 |                    | 86                   | 2                | 97.67%  |            |
|      |       | 3           | Rp 9,110,872.14  |                    | 86                   | 1                | 98.84%  |            |
|      |       | 4           | Rp 10,669,184.71 |                    | 100                  | 2                | 98.00%  |            |
|      |       | 5           | Rp 9,740,833.51  |                    | 87                   | 1                | 98.85%  |            |
|      |       | 6           | Rp 9,037,432.82  |                    | 84                   | 1                | 98.81%  |            |
|      |       | 7           | Rp 7,685,144.44  |                    | 88                   | 0                | 100.00% |            |

Table 4. 69 Recapitulation of DC 250 Gr 89 x 120 Continuous Review Heuristic Method

| Q | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|---|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 4 | 3.61 | 1           | Rp 4,202,043.15 | Rp 4,941,653.21    | 15                   | 1                | 93.33%  | 94.21%     |
|   |      | 2           | Rp 4,435,948.77 |                    | 26                   | 1                | 96.15%  |            |
|   |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|   |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|   |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|   |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|   |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|   |      | 8           | Rp 8,072,009.07 |                    | 23                   | 4                | 82.61%  |            |



Table 4. 69 Recapitulation of DC 250 Gr 89 x 120 Continuous Review Heuristic Method (cont'd)

| Q    | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 6    | 3.61 | 1           | Rp 2,850,704.59 | Rp 4,771,013.53    | 15                   | 0                | 100.00% | 95.11%     |
|      |      | 2           | Rp 5,811,587.66 |                    | 26                   | 2                | 92.31%  |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 6,682,591.25 |                    | 23                   | 3                | 86.96%  |            |
| 8    | 3.61 | 1           | Rp 4,172,096.71 | Rp 4,544,029.13    | 15                   | 1                | 93.33%  | 95.24%     |
|      |      | 2           | Rp 2,745,131.90 |                    | 26                   | 0                | 100.00% |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 6,611,779.69 |                    | 23                   | 3                | 86.96%  |            |
| 9.56 | 3.61 | 1           | Rp 4,155,026.13 | Rp 4,721,966.66    | 15                   | 1                | 93.33%  | 94.76%     |
|      |      | 2           | Rp 4,297,299.08 |                    | 26                   | 1                | 96.15%  |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 6,500,183.40 |                    | 23                   | 3                | 86.96%  |            |
| 12   | 3.61 | 1           | Rp 2,958,961.63 | Rp 4,786,273.67    | 15                   | 0                | 100.00% | 95.11%     |
|      |      | 2           | Rp 5,714,849.18 |                    | 26                   | 2                | 92.31%  |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 6,793,153.83 |                    | 23                   | 3                | 86.96%  |            |
| 14   | 3.61 | 1           | Rp 3,140,509.95 | Rp 4,293,710.49    | 15                   | 0                | 100.00% | 96.68%     |
|      |      | 2           | Rp 4,346,749.22 |                    | 26                   | 1                | 96.15%  |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 4,039,200.01 |                    | 23                   | 1                | 95.65%  |            |
| 16   | 3.61 | 1           | Rp 3,209,511.71 | Rp 4,277,787.49    | 15                   | 0                | 100.00% | 96.61%     |
|      |      | 2           | Rp 2,773,668.46 |                    | 26                   | 0                | 100.00% |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 5,415,895.05 |                    | 23                   | 2                | 91.30%  |            |
| 18   | 3.61 | 1           | Rp 3,057,439.87 | Rp 4,139,402.19    | 15                   | 0                | 100.00% | 97.16%     |
|      |      | 2           | Rp 2,961,246.06 |                    | 26                   | 0                | 100.00% |            |
|      |      | 3           | Rp 4,450,248.81 |                    | 21                   | 1                | 95.24%  |            |
|      |      | 4           | Rp 4,308,647.42 |                    | 20                   | 0                | 100.00% |            |
|      |      | 5           | Rp 6,885,030.31 |                    | 22                   | 3                | 86.36%  |            |
|      |      | 6           | Rp 3,997,791.14 |                    | 18                   | 0                | 100.00% |            |
|      |      | 7           | Rp 3,181,507.02 |                    | 16                   | 0                | 100.00% |            |
|      |      | 8           | Rp 4,273,306.91 |                    | 23                   | 1                | 95.65%  |            |

Table 4. 70 Recapitulation of AC 360 Gr 79 x 109 Continuous Review Heuristic Method

| Q    | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 2    | 1.19 | 1           | Rp 2,800,581.82 | Rp 3,415,617.29    | 22                   | 0                | 100.00% | 98.57%     |
|      |      | 2           | Rp 4,030,652.76 |                    | 35                   | 1                | 97.14%  |            |
| 3    | 1.19 | 1           | Rp 2,809,746.56 | Rp 3,356,779.95    | 22                   | 0                | 100.00% | 98.57%     |
|      |      | 2           | Rp 3,903,813.34 |                    | 35                   | 1                | 97.14%  |            |
| 4    | 1.19 | 1           | Rp 2,820,321.26 | Rp 2,627,505.41    | 22                   | 0                | 100.00% | 100.00%    |
|      |      | 2           | Rp 2,434,689.57 |                    | 35                   | 0                | 100.00% |            |
| 4.77 | 1.19 | 1           | Rp 2,816,747.01 | Rp 2,646,201.48    | 22                   | 0                | 100.00% | 100.00%    |
|      |      | 2           | Rp 2,475,655.95 |                    | 35                   | 0                | 100.00% |            |



Table 4. 70 Recapitulation of AC 360 Gr 79 x 109 Continuous Review Heuristic Method (cont'd)

| Q | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|---|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 6 | 1.19 | 1           | Rp 2,837,240.78 | Rp 3,339,536.43    | 22                   | 0                | 100.00% | 98.57%     |
|   |      | 2           | Rp 3,841,832.08 |                    | 35                   | 1                | 97.14%  |            |
| 7 | 1.19 | 1           | Rp 2,835,830.82 | Rp 2,591,227.43    | 22                   | 0                | 100.00% | 100.00%    |
|   |      | 2           | Rp 2,346,624.05 |                    | 35                   | 0                | 100.00% |            |
| 8 | 1.19 | 1           | Rp 2,842,880.62 | Rp 2,637,756.11    | 22                   | 0                | 100.00% | 100.00%    |
|   |      | 2           | Rp 2,432,631.61 |                    | 35                   | 0                | 100.00% |            |
| 9 | 1.19 | 1           | Rp 2,849,930.42 | Rp 2,670,537.68    | 22                   | 0                | 100.00% | 100.00%    |
|   |      | 2           | Rp 2,491,144.95 |                    | 35                   | 0                | 100.00% |            |

Table 4. 71 Recapitulation of AC 230 Gr 79 x 109 Continuous Review Heuristic Method

| Q    | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 1    | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,306,954.62    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,348,207.21 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 851,656.52   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 2    | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,311,337.27    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,361,947.41 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 872,977.52   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 3    | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,315,660.69    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,377,109.01 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 892,403.32   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 3.25 | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,316,549.07    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,380,662.51 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 895,956.82   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 4    | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,320,221.02    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,391,323.01 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 914,671.92   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 5    | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,324,307.54    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,403,168.01 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 935,519.12   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 6    | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,328,275.62    | 9                    | 0                | 100.00% | 98.86%     |
|      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|      |      | 6           | Rp 2,414,065.41 |                    | 11                   | 1                | 90.91%  |            |
|      |      | 7           | Rp 956,366.32   |                    | 8                    | 0                | 100.00% |            |
|      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |



Table 4. 71 Recapitulation of AC 230 Gr 79 x 109 Continuous Review Heuristic Method (cont'd)

| Q | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|---|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 7 | 0.49 | 1           | Rp 1,007,862.62 | Rp 1,332,954.39    | 9                    | 0                | 100.00% | 98.86%     |
|   |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|   |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|   |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|   |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|   |      | 6           | Rp 2,433,965.01 |                    | 11                   | 1                | 90.91%  |            |
|   |      | 7           | Rp 973,896.92   |                    | 8                    | 0                | 100.00% |            |
|   |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |

Table 4. 72 Recapitulation of Bontak Sticker 54 x 70 Continuous Review Heuristic Method

| Q    | ROP  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 1    | 0.43 | 1           | Rp 7,131,976.10 | Rp 5,000,816.85    | 24                   | 4                | 83.33%  | 84.13%     |
|      |      | 2           | Rp 5,198,234.18 |                    | 13                   | 3                | 76.92%  |            |
|      |      | 3           | Rp 6,770,329.46 |                    | 19                   | 5                | 73.68%  |            |
|      |      | 4           | Rp 2,007,160.48 |                    | 12                   | 1                | 91.67%  |            |
|      |      | 5           | Rp 307,297.93   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 8,589,902.95 |                    | 24                   | 5                | 79.17%  |            |
| 2    | 0.43 | 1           | Rp 5,366,389.54 | Rp 3,139,406.62    | 24                   | 3                | 87.50%  | 91.41%     |
|      |      | 2           | Rp 2,139,411.26 |                    | 13                   | 1                | 92.31%  |            |
|      |      | 3           | Rp 3,563,029.82 |                    | 19                   | 2                | 89.47%  |            |
|      |      | 4           | Rp 1,885,256.64 |                    | 12                   | 1                | 91.67%  |            |
|      |      | 5           | Rp 372,306.69   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 5,510,045.79 |                    | 24                   | 3                | 87.50%  |            |
| 3    | 0.43 | 1           | Rp 5,270,819.35 | Rp 3,603,056.72    | 24                   | 3                | 87.50%  | 90.35%     |
|      |      | 2           | Rp 2,163,641.49 |                    | 13                   | 1                | 92.31%  |            |
|      |      | 3           | Rp 6,577,986.64 |                    | 19                   | 4                | 78.95%  |            |
|      |      | 4           | Rp 504,554.07   |                    | 12                   | 0                | 100.00% |            |
|      |      | 5           | Rp 437,655.81   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 6,663,682.98 |                    | 24                   | 4                | 83.33%  |            |
| 4    | 0.43 | 1           | Rp 5,164,020.69 | Rp 3,058,594.93    | 24                   | 3                | 87.50%  | 91.92%     |
|      |      | 2           | Rp 2,030,781.46 |                    | 13                   | 1                | 92.31%  |            |
|      |      | 3           | Rp 5,110,787.88 |                    | 19                   | 3                | 84.21%  |            |
|      |      | 4           | Rp 376,183.39   |                    | 12                   | 0                | 100.00% |            |
|      |      | 5           | Rp 504,366.37   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 5,165,429.78 |                    | 24                   | 3                | 87.50%  |            |
| 4.47 | 0.43 | 1           | Rp 3,649,256.62 | Rp 1,560,476.82    | 24                   | 2                | 91.67%  | 97.22%     |
|      |      | 2           | Rp 526,200.97   |                    | 13                   | 0                | 100.00% |            |
|      |      | 3           | Rp 633,189.73   |                    | 19                   | 0                | 100.00% |            |
|      |      | 4           | Rp 393,303.50   |                    | 12                   | 0                | 100.00% |            |
|      |      | 5           | Rp 533,719.02   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 3,627,191.09 |                    | 24                   | 2                | 91.67%  |            |
| 5    | 0.43 | 1           | Rp 3,673,680.86 | Rp 1,846,127.14    | 24                   | 2                | 91.67%  | 96.35%     |
|      |      | 2           | Rp 541,489.94   |                    | 13                   | 0                | 100.00% |            |
|      |      | 3           | Rp 2,235,436.53 |                    | 19                   | 1                | 94.74%  |            |
|      |      | 4           | Rp 407,836.87   |                    | 12                   | 0                | 100.00% |            |
|      |      | 5           | Rp 564,950.45   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 3,653,368.17 |                    | 24                   | 2                | 91.67%  |            |
| 6    | 0.43 | 1           | Rp 5,250,342.79 | Rp 2,394,384.75    | 24                   | 3                | 87.50%  | 94.55%     |
|      |      | 2           | Rp 2,133,975.21 |                    | 13                   | 1                | 92.31%  |            |
|      |      | 3           | Rp 771,678.81   |                    | 19                   | 0                | 100.00% |            |
|      |      | 4           | Rp 436,086.75   |                    | 12                   | 0                | 100.00% |            |
|      |      | 5           | Rp 635,745.33   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 5,138,479.57 |                    | 24                   | 3                | 87.50%  |            |
| 7    | 0.43 | 1           | Rp 3,789,062.90 | Rp 1,913,325.38    | 24                   | 2                | 91.67%  | 96.53%     |
|      |      | 2           | Rp 655,850.90   |                    | 13                   | 0                | 100.00% |            |
|      |      | 3           | Rp 739,970.37   |                    | 19                   | 0                | 100.00% |            |
|      |      | 4           | Rp 468,420.95   |                    | 12                   | 0                | 100.00% |            |
|      |      | 5           | Rp 701,434.81   |                    | 14                   | 0                | 100.00% |            |
|      |      | 6           | Rp 5,125,212.34 |                    | 24                   | 3                | 87.50%  |            |



#### 4.3.6 Heuristic Method for Periodic Review (R, s, S System)

Just the same as heuristic for continuous review, heuristic method for periodic review is also brought off. For periodic review heuristic, this study limits to iterate on seven different review period (T). Also using replications to obtain each level result, Table 4.73 to 4.78 present the recapitulation of periodic review heuristic method output of the samples – AC 260 Gr 79 x 109, DC 400 Gr 79 x 109, DC 250 Gr 89 x 120, AC 360 Gr 79 x 109, AC 230 Gr 79 x 109, and Bontak Sticker 54 x 70 – correspondingly.

Table 4. 73 Recapitulation of AC 260 Gr 79 x 109 Periodic Review Heuristic Method

| T     | SS    | OUL   | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|-------|-------|-------|-------------|------------------|--------------------|----------------------|------------------|---------|------------|
| 10    | 11.35 | 16.4  | 1           | Rp 8,687,736.98  | Rp 11,974,713.92   | 33                   | 0                | 100.00% | 96.94%     |
|       |       |       | 2           | Rp 12,829,259.46 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 11,217,192.62 |                    | 41                   | 1                | 97.56%  |            |
|       |       |       | 4           | Rp 17,621,156.38 |                    | 48                   | 5                | 89.58%  |            |
|       |       |       | 5           | Rp 8,760,641.11  |                    | 48                   | 1                | 97.92%  |            |
|       |       |       | 6           | Rp 13,580,549.05 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 7           | Rp 11,126,461.87 |                    | 43                   | 1                | 97.67%  |            |
| 15    | 13.36 | 20.38 | 1           | Rp 8,988,378.57  | Rp 11,235,908.89   | 33                   | 0                | 100.00% | 98.48%     |
|       |       |       | 2           | Rp 12,838,120.31 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 9,832,986.07  |                    | 41                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 11,900,195.15 |                    | 48                   | 1                | 97.92%  |            |
|       |       |       | 5           | Rp 7,952,141.32  |                    | 48                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 15,536,578.31 |                    | 48                   | 3                | 93.75%  |            |
|       |       |       | 7           | Rp 11,602,962.49 |                    | 43                   | 1                | 97.67%  |            |
| 20    | 15.1  | 24.09 | 1           | Rp 9,738,670.11  | Rp 11,240,063.56   | 33                   | 0                | 100.00% | 98.81%     |
|       |       |       | 2           | Rp 12,902,631.06 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 10,175,603.22 |                    | 41                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 13,673,537.12 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 5           | Rp 7,883,302.20  |                    | 48                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 14,027,223.98 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 7           | Rp 10,279,477.23 |                    | 43                   | 0                | 100.00% |            |
| 25    | 16.67 | 27.62 | 1           | Rp 9,556,363.27  | Rp 12,092,367.39   | 33                   | 0                | 100.00% | 97.88%     |
|       |       |       | 2           | Rp 13,088,648.18 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 10,125,729.48 |                    | 41                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 15,710,846.42 |                    | 48                   | 3                | 93.75%  |            |
|       |       |       | 5           | Rp 9,749,103.74  |                    | 48                   | 1                | 97.92%  |            |
|       |       |       | 6           | Rp 13,891,274.62 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 7           | Rp 12,524,605.99 |                    | 43                   | 1                | 97.67%  |            |
| 29.58 | 17.98 | 30.73 | 1           | Rp 9,648,031.21  | Rp 11,950,118.79   | 33                   | 0                | 100.00% | 98.18%     |
|       |       |       | 2           | Rp 13,322,230.58 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 10,788,318.74 |                    | 41                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 14,920,754.96 |                    | 48                   | 3                | 93.75%  |            |
|       |       |       | 5           | Rp 8,580,173.09  |                    | 48                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 13,910,822.15 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 7           | Rp 12,480,500.76 |                    | 43                   | 1                | 97.67%  |            |
| 35    | 19.42 | 34.3  | 1           | Rp 10,223,709.83 | Rp 11,683,952.94   | 33                   | 0                | 100.00% | 98.81%     |
|       |       |       | 2           | Rp 13,159,816.08 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 10,883,434.00 |                    | 41                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 12,102,149.03 |                    | 48                   | 1                | 97.92%  |            |
|       |       |       | 5           | Rp 8,850,468.07  |                    | 48                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 16,022,639.41 |                    | 48                   | 3                | 93.75%  |            |
|       |       |       | 7           | Rp 10,545,454.15 |                    | 43                   | 0                | 100.00% |            |
| 40    | 20.66 | 37.51 | 1           | Rp 10,753,799.63 | Rp 12,086,195.49   | 33                   | 0                | 100.00% | 98.81%     |
|       |       |       | 2           | Rp 13,178,421.34 |                    | 39                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 11,356,612.45 |                    | 41                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 14,083,453.44 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 5           | Rp 9,563,160.89  |                    | 48                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 14,401,985.35 |                    | 48                   | 2                | 95.83%  |            |
|       |       |       | 7           | Rp 11,265,935.33 |                    | 43                   | 0                | 100.00% |            |



Table 4. 73 Recapitulation of AC 260 Gr 79 x 109 Periodic Review Heuristic Method (continued)

| T  | SS    | OUL   | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|----|-------|-------|-------------|------------------|--------------------|----------------------|------------------|---------|------------|
| 45 | 21.83 | 40.64 | 1           | Rp 10,970,972.81 | Rp 12,221,266.35   | 33                   | 0                | 100.00% | 98.48%     |
|    |       |       | 2           | Rp 13,537,102.98 |                    | 39                   | 0                | 100.00% |            |
|    |       |       | 3           | Rp 10,869,243.80 |                    | 41                   | 0                | 100.00% |            |
|    |       |       | 4           | Rp 10,933,511.99 |                    | 48                   | 0                | 100.00% |            |
|    |       |       | 5           | Rp 10,822,109.84 |                    | 48                   | 1                | 97.92%  |            |
|    |       |       | 6           | Rp 15,776,947.94 |                    | 48                   | 3                | 93.75%  |            |
|    |       |       | 7           | Rp 12,638,975.08 |                    | 43                   | 1                | 97.67%  |            |

Table 4. 74 Recapitulation of DC 400 Gr 79 x 109 Periodic Review Heuristic Method

| T     | SS    | OUL    | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL     | Average SL |
|-------|-------|--------|-------------|------------------|--------------------|----------------------|------------------|--------|------------|
| 5     | 21.48 | 39.18  | 1           | Rp 17,364,287.17 | Rp 14,405,102.33   | 75                   | 7                | 90.67% | 93.91%     |
|       |       |        | 2           | Rp 13,710,419.75 |                    | 86                   | 5                | 94.19% |            |
|       |       |        | 3           | Rp 10,866,528.65 |                    | 86                   | 3                | 96.51% |            |
|       |       |        | 4           | Rp 20,108,727.24 |                    | 100                  | 9                | 91.00% |            |
|       |       |        | 5           | Rp 15,490,415.93 |                    | 87                   | 6                | 93.10% |            |
|       |       |        | 6           | Rp 10,829,823.13 |                    | 84                   | 3                | 96.43% |            |
|       |       |        | 7           | Rp 12,465,514.46 |                    | 88                   | 4                | 95.45% |            |
| 10    | 25.77 | 51.62  | 1           | Rp 14,434,724.25 | Rp 13,503,057.58   | 75                   | 5                | 93.33% | 94.74%     |
|       |       |        | 2           | Rp 11,196,717.39 |                    | 86                   | 3                | 96.51% |            |
|       |       |        | 3           | Rp 13,741,626.93 |                    | 86                   | 5                | 94.19% |            |
|       |       |        | 4           | Rp 17,241,736.90 |                    | 100                  | 7                | 93.00% |            |
|       |       |        | 5           | Rp 17,163,379.65 |                    | 87                   | 7                | 91.95% |            |
|       |       |        | 6           | Rp 9,536,924.80  |                    | 84                   | 2                | 97.62% |            |
|       |       |        | 7           | Rp 11,206,293.12 |                    | 88                   | 3                | 96.59% |            |
| 15    | 29.44 | 63.44  | 1           | Rp 18,223,942.31 | Rp 16,332,204.65   | 75                   | 7                | 90.67% | 93.07%     |
|       |       |        | 2           | Rp 13,285,202.29 |                    | 86                   | 4                | 95.35% |            |
|       |       |        | 3           | Rp 9,685,789.61  |                    | 86                   | 2                | 97.67% |            |
|       |       |        | 4           | Rp 29,578,384.64 |                    | 100                  | 15               | 85.00% |            |
|       |       |        | 5           | Rp 16,169,194.09 |                    | 87                   | 6                | 93.10% |            |
|       |       |        | 6           | Rp 9,914,542.64  |                    | 84                   | 2                | 97.62% |            |
|       |       |        | 7           | Rp 17,468,376.98 |                    | 88                   | 7                | 92.05% |            |
| 19.81 | 32.58 | 74.42  | 1           | Rp 14,741,683.56 | Rp 15,523,506.45   | 75                   | 5                | 93.33% | 93.87%     |
|       |       |        | 2           | Rp 11,986,081.20 |                    | 86                   | 3                | 96.51% |            |
|       |       |        | 3           | Rp 10,446,324.32 |                    | 86                   | 2                | 97.67% |            |
|       |       |        | 4           | Rp 25,326,293.05 |                    | 100                  | 12               | 88.00% |            |
|       |       |        | 5           | Rp 16,561,956.49 |                    | 87                   | 6                | 93.10% |            |
|       |       |        | 6           | Rp 11,673,415.02 |                    | 84                   | 3                | 96.43% |            |
|       |       |        | 7           | Rp 17,928,791.54 |                    | 88                   | 7                | 92.05% |            |
| 25    | 35.66 | 85.97  | 1           | Rp 15,982,302.38 | Rp 15,600,869.20   | 75                   | 5                | 93.33% | 94.22%     |
|       |       |        | 2           | Rp 15,204,755.33 |                    | 86                   | 5                | 94.19% |            |
|       |       |        | 3           | Rp 12,350,116.94 |                    | 86                   | 3                | 96.51% |            |
|       |       |        | 4           | Rp 16,931,792.77 |                    | 100                  | 6                | 94.00% |            |
|       |       |        | 5           | Rp 16,730,984.67 |                    | 87                   | 6                | 93.10% |            |
|       |       |        | 6           | Rp 14,779,819.66 |                    | 84                   | 4                | 95.24% |            |
|       |       |        | 7           | Rp 17,226,312.68 |                    | 88                   | 6                | 93.18% |            |
| 30    | 38.4  | 96.86  | 1           | Rp 17,875,509.93 | Rp 17,004,929.28   | 75                   | 6                | 92.00% | 93.66%     |
|       |       |        | 2           | Rp 17,778,073.35 |                    | 86                   | 6                | 93.02% |            |
|       |       |        | 3           | Rp 12,351,244.18 |                    | 86                   | 3                | 96.51% |            |
|       |       |        | 4           | Rp 24,695,405.80 |                    | 100                  | 11               | 89.00% |            |
|       |       |        | 5           | Rp 13,636,266.68 |                    | 87                   | 3                | 96.55% |            |
|       |       |        | 6           | Rp 11,456,371.22 |                    | 84                   | 2                | 97.62% |            |
|       |       |        | 7           | Rp 21,241,633.80 |                    | 88                   | 8                | 90.91% |            |
| 35    | 40.95 | 107.56 | 1           | Rp 17,909,883.15 | Rp 17,534,902.35   | 75                   | 6                | 92.00% | 93.57%     |
|       |       |        | 2           | Rp 15,276,924.27 |                    | 86                   | 4                | 95.35% |            |
|       |       |        | 3           | Rp 17,720,603.54 |                    | 86                   | 6                | 93.02% |            |
|       |       |        | 4           | Rp 19,548,132.82 |                    | 100                  | 7                | 93.00% |            |
|       |       |        | 5           | Rp 19,583,972.65 |                    | 87                   | 7                | 91.95% |            |
|       |       |        | 6           | Rp 12,544,186.24 |                    | 84                   | 2                | 97.62% |            |
|       |       |        | 7           | Rp 20,160,613.75 |                    | 88                   | 7                | 92.05% |            |
| 40    | 43.36 | 118.12 | 1           | Rp 11,300,553.40 | Rp 18,554,967.70   | 75                   | 1                | 98.67% | 93.52%     |
|       |       |        | 2           | Rp 14,172,350.33 |                    | 86                   | 3                | 96.51% |            |
|       |       |        | 3           | Rp 17,025,982.51 |                    | 86                   | 5                | 94.19% |            |
|       |       |        | 4           | Rp 31,189,006.57 |                    | 100                  | 14               | 86.00% |            |
|       |       |        | 5           | Rp 28,208,570.03 |                    | 87                   | 12               | 86.21% |            |
|       |       |        | 6           | Rp 12,263,295.30 |                    | 84                   | 2                | 97.62% |            |
|       |       |        | 7           | Rp 15,725,015.80 |                    | 88                   | 4                | 95.45% |            |



Table 4. 75 Recapitulation of DC 250 Gr 89 x 120 Periodic Review Heuristic Method

| T     | SS    | OUL   | Replication | Total Cost       | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|-------|-------|-------|-------------|------------------|--------------------|----------------------|------------------|---------|------------|
| 50    | 11.05 | 17.36 | 1           | Rp 2,835,813.59  | Rp 3,973,658.04    | 15                   | 0                | 100.00% | 97.77%     |
|       |       |       | 2           | Rp 3,035,001.92  |                    | 26                   | 0                | 100.00% |            |
|       |       |       | 3           | Rp 4,450,248.81  |                    | 21                   | 1                | 95.24%  |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 3,089,889.48  |                    | 22                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,181,507.02  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 6,890,364.90  |                    | 23                   | 3                | 86.96%  |            |
| 60    | 12.02 | 19.49 | 1           | Rp 3,064,815.69  | Rp 4,396,723.92    | 15                   | 0                | 100.00% | 95.76%     |
|       |       |       | 2           | Rp 7,459,947.63  |                    | 26                   | 3                | 88.46%  |            |
|       |       |       | 3           | Rp 4,450,248.81  |                    | 21                   | 1                | 95.24%  |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 4,558,620.45  |                    | 22                   | 1                | 95.45%  |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,181,507.02  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 4,152,213.18  |                    | 23                   | 3                | 86.96%  |            |
| 70    | 12.92 | 21.56 | 1           | Rp 3,132,310.13  | Rp 4,471,118.50    | 15                   | 0                | 100.00% | 96.97%     |
|       |       |       | 2           | Rp 9,006,362.23  |                    | 26                   | 4                | 84.62%  |            |
|       |       |       | 3           | Rp 3,313,232.08  |                    | 21                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 4,560,741.77  |                    | 22                   | 1                | 95.45%  |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,181,507.02  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 4,268,356.20  |                    | 23                   | 1                | 95.65%  |            |
| 82.26 | 13.95 | 24.01 | 1           | Rp 3,265,610.81  | Rp 3,515,307.67    | 15                   | 0                | 100.00% | 99.52%     |
|       |       |       | 2           | Rp 4,879,285.38  |                    | 26                   | 1                | 96.15%  |            |
|       |       |       | 3           | Rp 3,064,104.56  |                    | 21                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 3,183,101.13  |                    | 22                   | 0                | 100.00% |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,181,507.02  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 2,242,413.88  |                    | 23                   | 0                | 100.00% |            |
| 90    | 14.55 | 25.52 | 1           | Rp 3,027,118.28  | Rp 4,232,556.54    | 15                   | 0                | 100.00% | 97.38%     |
|       |       |       | 2           | Rp 6,199,757.37  |                    | 26                   | 2                | 92.31%  |            |
|       |       |       | 3           | Rp 3,317,719.52  |                    | 21                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 4,411,387.77  |                    | 22                   | 1                | 95.45%  |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,181,507.02  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 5,416,523.75  |                    | 23                   | 2                | 91.30%  |            |
| 100   | 15.31 | 27.43 | 1           | Rp 3,317,861.22  | Rp 4,573,504.80    | 15                   | 0                | 100.00% | 96.97%     |
|       |       |       | 2           | Rp 9,299,417.72  |                    | 26                   | 4                | 84.62%  |            |
|       |       |       | 3           | Rp 3,218,725.44  |                    | 21                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 4,402,933.38  |                    | 22                   | 1                | 95.45%  |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,507,665.29  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 4,534,996.74  |                    | 23                   | 1                | 95.65%  |            |
| 110   | 16.02 | 29.31 | 1           | Rp 3,172,780.00  | Rp 4,748,707.89    | 15                   | 0                | 100.00% | 96.48%     |
|       |       |       | 2           | Rp 10,609,319.39 |                    | 26                   | 5                | 80.77%  |            |
|       |       |       | 3           | Rp 3,595,588.94  |                    | 21                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 4,594,946.87  |                    | 22                   | 1                | 95.45%  |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,407,472.06  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 4,303,117.33  |                    | 23                   | 1                | 95.65%  |            |
| 120   | 16.71 | 31.16 | 1           | Rp 2,828,192.23  | Rp 4,801,699.66    | 15                   | 0                | 100.00% | 95.92%     |
|       |       |       | 2           | Rp 10,260,313.50 |                    | 26                   | 5                | 80.77%  |            |
|       |       |       | 3           | Rp 3,584,937.21  |                    | 21                   | 0                | 100.00% |            |
|       |       |       | 4           | Rp 4,308,647.42  |                    | 20                   | 0                | 100.00% |            |
|       |       |       | 5           | Rp 6,201,705.82  |                    | 22                   | 2                | 90.91%  |            |
|       |       |       | 6           | Rp 3,997,791.14  |                    | 18                   | 0                | 100.00% |            |
|       |       |       | 7           | Rp 3,181,507.02  |                    | 16                   | 0                | 100.00% |            |
|       |       |       | 8           | Rp 4,050,502.88  |                    | 23                   | 1                | 95.65%  |            |



Table 4. 76 Recapitulation of AC 360 Gr 79 x 109 Periodic Review Heuristic Method

| T     | SS   | OUL   | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|-------|------|-------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 50    | 3.37 | 6.66  | 1           | Rp 4,212,172.75 | Rp 3,379,646.27    | 22                   | 1                | 95.45%  | 97.73%     |
|       |      |       | 2           | Rp 2,547,119.78 |                    | 35                   | 0                | 100.00% |            |
| 60    | 3.67 | 7.57  | 1           | Rp 4,212,172.75 | Rp 3,404,013.90    | 22                   | 1                | 95.45%  | 97.73%     |
|       |      |       | 2           | Rp 2,595,855.04 |                    | 35                   | 0                | 100.00% |            |
| 70    | 3.94 | 8.45  | 1           | Rp 4,212,172.75 | Rp 4,105,385.62    | 22                   | 1                | 95.45%  | 96.30%     |
|       |      |       | 2           | Rp 3,998,598.48 |                    | 35                   | 1                | 97.14%  |            |
| 78.36 | 4.16 | 9.18  | 1           | Rp 4,212,172.75 | Rp 3,459,672.07    | 22                   | 1                | 95.45%  | 97.73%     |
|       |      |       | 2           | Rp 2,707,171.39 |                    | 35                   | 0                | 100.00% |            |
| 90    | 4.44 | 10.17 | 1           | Rp 4,212,172.75 | Rp 4,140,550.02    | 22                   | 1                | 95.45%  | 96.30%     |
|       |      |       | 2           | Rp 4,068,927.29 |                    | 35                   | 1                | 97.14%  |            |
| 100   | 4.67 | 11.01 | 1           | Rp 4,212,172.75 | Rp 3,596,593.29    | 22                   | 1                | 95.45%  | 97.73%     |
|       |      |       | 2           | Rp 2,981,013.82 |                    | 35                   | 0                | 100.00% |            |
| 110   | 4.89 | 6.94  | 1           | Rp 2,842,570.43 | Rp 2,781,649.58    | 22                   | 0                | 100.00% | 100.00%    |
|       |      |       | 2           | Rp 2,720,728.73 |                    | 35                   | 0                | 100.00% |            |
| 120   | 5.1  | 12.66 | 1           | Rp 4,212,172.75 | Rp 3,439,647.40    | 22                   | 1                | 95.45%  | 97.73%     |
|       |      |       | 2           | Rp 2,667,122.05 |                    | 35                   | 0                | 100.00% |            |

Table 4. 77 Recapitulation of AC 230 Gr 79 x 109 Periodic Review Heuristic Method

| T      | SS   | OUL  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|--------|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 90     | 2.54 | 4.31 | 1           | Rp 1,007,862.62 | Rp 1,160,517.81    | 9                    | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|        |      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,075,130.06 |                    | 11                   | 0                | 100.00% |            |
|        |      |      | 7           | Rp 953,239.24   |                    | 8                    | 0                | 100.00% |            |
|        |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 110    | 2.8  | 4.95 | 1           | Rp 1,007,862.62 | Rp 1,186,546.27    | 9                    | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 1,303,552.75 |                    | 7                    | 0                | 100.00% |            |
|        |      |      | 3           | Rp 1,061,516.76 |                    | 15                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,050,857.28 |                    | 11                   | 0                | 100.00% |            |
|        |      |      | 7           | Rp 868,898.11   |                    | 8                    | 0                | 100.00% |            |
|        |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 130    | 3.04 | 5.57 | 1           | Rp 1,007,862.62 | Rp 1,371,935.23    | 9                    | 0                | 100.00% | 98.86%     |
|        |      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|        |      |      | 3           | Rp 1,153,580.84 |                    | 15                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|        |      |      | 6           | Rp 2,502,495.44 |                    | 11                   | 1                | 90.91%  |            |
|        |      |      | 7           | Rp 964,837.87   |                    | 8                    | 0                | 100.00% |            |
|        |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 150    | 3.26 | 6.17 | 1           | Rp 1,007,862.62 | Rp 1,219,301.71    | 9                    | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|        |      |      | 3           | Rp 1,118,647.56 |                    | 15                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,168,942.46 |                    | 11                   | 0                | 100.00% |            |
|        |      |      | 7           | Rp 1,112,256.00 |                    | 8                    | 0                | 100.00% |            |
|        |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 170.92 | 3.47 | 6.78 | 1           | Rp 1,154,130.44 | Rp 1,253,077.99    | 9                    | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 1,293,986.73 |                    | 7                    | 0                | 100.00% |            |
|        |      |      | 3           | Rp 1,047,193.78 |                    | 15                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,197,280.43 |                    | 11                   | 0                | 100.00% |            |
|        |      |      | 7           | Rp 1,132,349.86 |                    | 8                    | 0                | 100.00% |            |
|        |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 190    | 3.66 | 7.33 | 1           | Rp 1,007,862.62 | Rp 1,181,540.19    | 9                    | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|        |      |      | 3           | Rp 901,205.50   |                    | 15                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,053,381.61 |                    | 11                   | 0                | 100.00% |            |
|        |      |      | 7           | Rp 1,143,166.71 |                    | 8                    | 0                | 100.00% |            |
|        |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |



Table 4. 77 Recapitulation of AC 230 Gr 79 x 109 Periodic Review Heuristic Method (continued)

| T   | SS   | OUL  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|-----|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 210 | 3.85 | 7.9  | 1           | Rp 1,007,862.62 | Rp 1,241,807.09    | 9                    | 0                | 100.00% | 100.00%    |
|     |      |      | 2           | Rp 1,147,022.42 |                    | 7                    | 0                | 100.00% |            |
|     |      |      | 3           | Rp 1,339,632.62 |                    | 15                   | 0                | 100.00% |            |
|     |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|     |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|     |      |      | 6           | Rp 1,098,781.13 |                    | 11                   | 0                | 100.00% |            |
|     |      |      | 7           | Rp 1,141,475.25 |                    | 8                    | 0                | 100.00% |            |
|     |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |
| 230 | 4.02 | 8.45 | 1           | Rp 1,007,862.62 | Rp 1,288,901.41    | 9                    | 0                | 100.00% | 100.00%    |
|     |      |      | 2           | Rp 1,293,986.73 |                    | 7                    | 0                | 100.00% |            |
|     |      |      | 3           | Rp 1,480,049.01 |                    | 15                   | 0                | 100.00% |            |
|     |      |      | 4           | Rp 1,365,832.74 |                    | 4                    | 0                | 100.00% |            |
|     |      |      | 5           | Rp 1,476,867.77 |                    | 5                    | 0                | 100.00% |            |
|     |      |      | 6           | Rp 1,197,280.43 |                    | 11                   | 0                | 100.00% |            |
|     |      |      | 7           | Rp 1,132,349.86 |                    | 8                    | 0                | 100.00% |            |
|     |      |      | 8           | Rp 1,356,982.15 |                    | 5                    | 0                | 100.00% |            |

Table 4. 78 Recapitulation of Bontak Sticker 54 x 70 Periodic Review Heuristic Method

| T      | SS   | OUL  | Replication | Total Cost      | Average Total Cost | Total Customer Order | Total Lost Order | SL      | Average SL |
|--------|------|------|-------------|-----------------|--------------------|----------------------|------------------|---------|------------|
| 90     | 2.42 | 4.8  | 1           | Rp 2,313,818.53 | Rp 2,449,465.37    | 24                   | 1                | 95.83%  | 93.86%     |
|        |      |      | 2           | Rp 2,268,325.51 |                    | 13                   | 1                | 92.31%  |            |
|        |      |      | 3           | Rp 663,920.84   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 2,058,959.36 |                    | 12                   | 1                | 91.67%  |            |
|        |      |      | 5           | Rp 527,881.84   |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 6,863,886.14 |                    | 24                   | 4                | 83.33%  |            |
| 110    | 2.67 | 5.57 | 1           | Rp 942,407.80   | Rp 1,836,694.13    | 24                   | 0                | 100.00% | 97.22%     |
|        |      |      | 2           | Rp 906,897.53   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 710,659.07   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 777,373.03   |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 617,182.10   |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 7,065,645.24 |                    | 24                   | 4                | 83.33%  |            |
| 130    | 2.9  | 6.31 | 1           | Rp 895,635.02   | Rp 1,019,131.01    | 24                   | 0                | 100.00% | 99.31%     |
|        |      |      | 2           | Rp 835,213.81   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 768,959.33   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 701,907.91   |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 707,248.16   |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 2,205,821.80 |                    | 24                   | 1                | 95.83%  |            |
| 150    | 3.11 | 7.04 | 1           | Rp 2,492,558.59 | Rp 1,595,545.55    | 24                   | 1                | 95.83%  | 97.92%     |
|        |      |      | 2           | Rp 867,180.42   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 821,248.84   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 784,305.66   |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 790,796.33   |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 3,817,183.44 |                    | 24                   | 2                | 91.67%  |            |
| 173.12 | 3.33 | 7.86 | 1           | Rp 954,874.68   | Rp 2,185,952.94    | 24                   | 0                | 100.00% | 96.53%     |
|        |      |      | 2           | Rp 907,873.87   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 849,478.30   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,023,660.93 |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 887,642.36   |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 8,492,187.49 |                    | 24                   | 5                | 79.17%  |            |
| 190    | 3.49 | 8.46 | 1           | Rp 889,259.58   | Rp 903,825.52      | 24                   | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 837,378.00   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 773,999.56   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 952,014.65   |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 962,637.29   |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,007,664.01 |                    | 24                   | 0                | 100.00% |            |
| 210    | 3.67 | 9.15 | 1           | Rp 990,275.02   | Rp 983,056.79      | 24                   | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 911,630.94   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 860,277.42   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,040,225.75 |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,046,900.21 |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,049,031.37 |                    | 24                   | 0                | 100.00% |            |
| 230    | 3.84 | 9.84 | 1           | Rp 1,051,362.83 | Rp 1,059,535.68    | 24                   | 0                | 100.00% | 100.00%    |
|        |      |      | 2           | Rp 998,889.03   |                    | 13                   | 0                | 100.00% |            |
|        |      |      | 3           | Rp 936,984.35   |                    | 19                   | 0                | 100.00% |            |
|        |      |      | 4           | Rp 1,119,948.28 |                    | 12                   | 0                | 100.00% |            |
|        |      |      | 5           | Rp 1,126,561.47 |                    | 14                   | 0                | 100.00% |            |
|        |      |      | 6           | Rp 1,123,468.10 |                    | 24                   | 0                | 100.00% |            |



#### 4.4 Holding Cost Justification

For this research, holding cost rate is adjusted to have the value of 12.3%. However, the holding cost in Indonesia could exceed the specified rate in some time future, influenced by inflation rate, bank interest rate, and several other factors. Therefore, this subchapter compares the total inventory cost with different rates of holding cost of one chosen sample. Table 4.79 recapitulates the total inventory cost of AC 360 Gr 79 x 109 with different rates of inventory holding cost.

Table 4. 79 Recapitulation of Total Inventory Cost of AC 360 Gr 79 x 109 with Different rates of Inventory Holding Cost

|       | Existing        |                  | s, Q System     |                 | R, s, S System  |                 |
|-------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|       | h = 12.3 %      | h = 25%          | h = 12.3 %      | h = 25%         | h = 12.3 %      | h = 25%         |
| Rep 1 | Rp 9,295,993.25 | Rp 17,261,512.13 | Rp 2,816,747.01 | Rp 5,589,012.39 | Rp 4,212,172.75 | Rp 6,954,390.42 |
| Rep 2 | Rp 8,342,275.15 | Rp 15,323,069.08 | Rp 2,475,655.95 | Rp 4,759,682.41 | Rp 2,707,171.39 | Rp 5,230,240.20 |
|       | Rp 8,819,134.20 | Rp 16,292,290.61 | Rp 2,646,201.48 | Rp 5,174,347.40 | Rp 3,459,672.07 | Rp 6,092,315.31 |
|       | 84.74%          |                  | 95.54%          |                 | 76.10%          |                 |

From Table 4.79, total inventory cost ascents as the rate of inventory holding cost upsurges. Nevertheless, since the total cost is elevated for all types of inventory control systems and the increases are more or less the same – approximately 85% – then the change in holding cost rate is not sensitive for the inventory control system decision in the company.



## **CHAPTER V**

### **ANALYSIS AND INTERPRETATION**

This chapter includes analysis and interpretation of the results of all scenarios that conducted in the previous chapter. Several analyses regarding to raw material classification and the inventory control system decision for each sample will be carried out.

#### **5.1 Raw Material Classification**

In most companies, most of the total annual dollar usage comes from only several product types. By this mean, the behavior of each product is unique one to the others. Therefore, for the sake of warehouse management, it is essential to categorize products to apply different inventory control system for different raw material type.

There are several methods to classify raw materials; one of the methods is ABC method. In many cases, company uses ABC method to classify raw material since the calculation is utterly straightforward. As stated earlier in this paper, ABC method is based on Pareto effect, in which most annual dollar usage is from few items. One-fifth of the total item numbers contribute 80% of the total value; 30% of the total item numbers contribute 15% of the total value, while the rest half of the total item numbers contribute only 5% of the total value.

The contribution of the total annual dollar usage is dependent to two main factors – annual consumption volume and unit price. In one case, the contribution can be high even when the annual consumption volume is low. On the other hand, it is also possible for a raw material to contribute much due to high annual consumption.

Other than annual dollar usage which has been captured through ABC method, coefficient of variance ( $CV$ ) is also considered for the classification. Calculating  $CV$  for each raw material would give the information of the steadiness of raw material consumption; the higher the  $CV$  value, the more fluctuated the consumption rate of the raw material is.



In this research there are 85 raw material types to be classified using ABC method. The classification is based on the annual dollar usage in 2014. Using the steps that have been stated in subchapter 2.2, it is found that 10 raw materials are categorized in A class, 8 raw materials in B class, and the rest 67 types are in C class. Referring to Table 4.1, A to C class each contributes 78.30%, 12.12%, and 9.58%, respectively.

For the company, there are 17 items that are identified as dead items. Dead item contributes nothing to total annual dollar usage. It means that the raw material is no longer used by the company, thus, dead items will not be considered for further calculation.

## 5.2 Inventory Control System for AC 260 Gr 79 x 109

Raw material AC 260 Gr 79 x 109 represents other items that are classified in A class with high value of CV. This raw material contributes 8.34% of the total annual dollar usage, mainly due to its high unit price; one unit of AC 260 Gr 79 x 109 has the price of Rp. 2,273,304.00.

From the simulation result, total inventory cost (horizontal) against the service level (vertical) for each inventory control system is presented in Figure 5.1. Table 5.1 recapitulates AC 260 Gr 79 x 109 all scenarios total inventory cost and service level, including the heuristic method results for continuous and periodic review inventory control systems.

Table 5. 1 AC 260 Gr 79 x 109 Total Inventory Cost and Service Level Comparison

| Existing    |       |      | Total Inventory Cost |               | SL     |
|-------------|-------|------|----------------------|---------------|--------|
|             |       |      | Rp                   | 41,389,082.45 | 100%   |
| s, Q System | Q     | ROP  | Rp                   | 12,665,538.53 | 95.19% |
|             | 7.5   | 6.55 | Rp                   | 11,830,680.31 | 96.44% |
|             | 10    | 6.55 | Rp                   | 11,804,900.57 | 96.61% |
|             | 11.63 | 6.55 | Rp                   | 11,863,350.62 | 96.61% |
|             | 12.5  | 6.55 | Rp                   | 11,285,521.99 | 97.31% |
|             | 15    | 6.55 | Rp                   | 11,783,400.27 | 96.85% |
|             | 17.5  | 6.55 | Rp                   | 11,231,332.80 | 98.08% |
|             | 20    | 6.55 | Rp                   | 11,876,474.16 | 96.85% |
|             | 22.5  | 6.55 | Rp                   | 11,876,474.16 | 96.85% |

Table 5. 1 AC 260 Gr 79 x 109 Total Inventory Cost and Service Level Comparison (continued)

| R, s, S System |       |       |       | Total Inventory Cost |               | SL     |
|----------------|-------|-------|-------|----------------------|---------------|--------|
|                | T     | SS    | OUL   |                      |               |        |
|                | 10    | 11.35 | 16.4  | Rp                   | 11,974,713.92 | 96.94% |
|                | 15    | 13.36 | 20.38 | Rp                   | 11,235,908.89 | 98.48% |
|                | 20    | 15.1  | 24.09 | Rp                   | 11,240,063.56 | 98.81% |
|                | 25    | 16.67 | 27.62 | Rp                   | 12,092,367.39 | 97.88% |
|                | 29.58 | 17.98 | 30.73 | Rp                   | 11,950,118.79 | 98.18% |
|                | 35    | 19.42 | 34.3  | Rp                   | 11,683,952.94 | 98.81% |
|                | 40    | 20.66 | 37.51 | Rp                   | 12,086,195.49 | 98.81% |
|                | 45    | 21.83 | 40.64 | Rp                   | 12,221,266.35 | 98.48% |

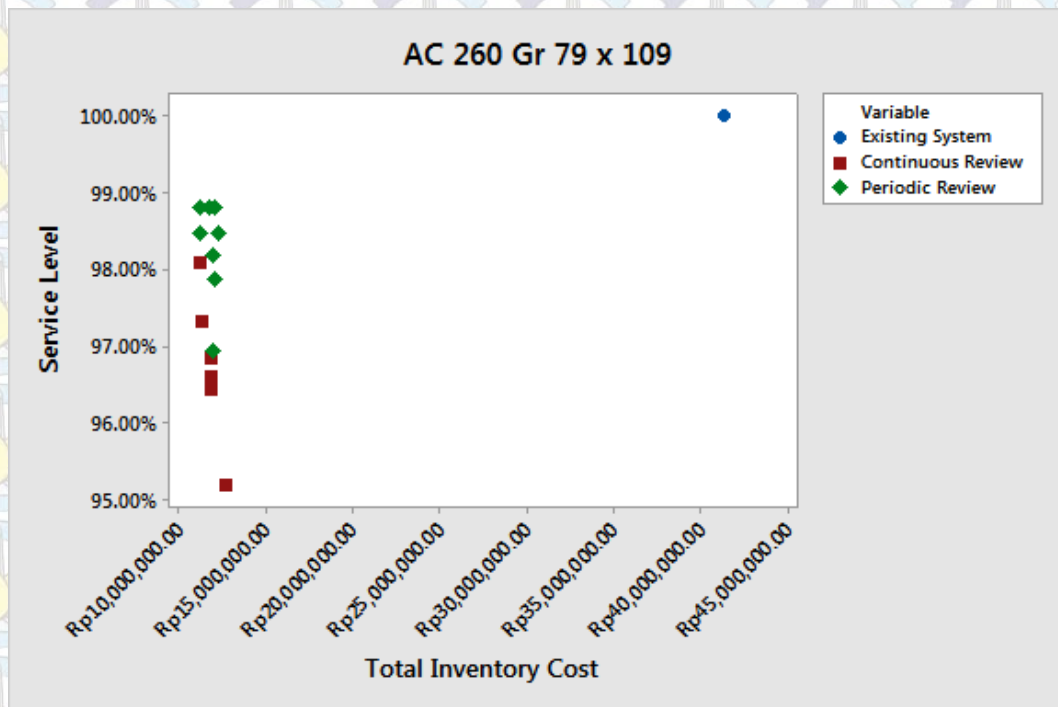


Figure 5. 1 Scatter Plot of AC 260 Gr 79 x 109 Total Inventory Cost Comparison

According to the comparison in Table 5.1, it can be interfered that total inventory cost in existing inventory control system is generally larger than total cost in both scenarios. Although continuous review inventory system result is cheaper relatively to periodic review control system, the gap between them is tiny. In fact, in heuristic method, the decision is arbitrary for several levels between continuous and periodic review inventory control system. Therefore, both reviews are actually can be applied for AC 260 Gr 79 x 109, and the rest of raw material that is categorized in A class with high value of CV.



All inventory control system AC 260 Gr 79 x 109 meet the predetermined target service level of 95%. According to Figure 5.1, periodic review inventory control system with review period of 15 days gives the best result. If the company decided to implement the recommended system over existing system inventory control system, company could save Rp. 30,153,173.56 or equal to 72.85% annually, cutting down total inventory cost from Rp. 41,389,082.45 to Rp. 11,235,908.89.

### 5.3 Inventory Control System for DC 400 Gr 79 x 109

Raw material DC 400 Gr 79 x 109 represents other items that are classified in A class with low value of CV. This raw material contributes 28.44 % of the total annual dollar usage, the biggest contributor among all raw material types. Compared to AC 260 Gr 79x 109, this raw material is far cheaper with unit price only worth of Rp. 1,222,500.00. However, in terms of annual consumption volume, DC 400 Gr 79 x 109 dominates with 622.67 units compared to only 143.55 units for AC 260 Gr 79x 109.

From the simulation result, total inventory cost as well as the service level for each inventory control system can be compared in Figure 5.2. Table 5.2 recapitulates DC 400 Gr 79 x 109 all scenarios total inventory cost and service level, including the heuristic method results for continuous and periodic review inventory control systems.

Table 5. 2 DC 400 Gr 79 x 109 Total Inventory Cost and Service Level Comparison

| Existing    |      |       | Total Inventory Cost | SL     |
|-------------|------|-------|----------------------|--------|
|             |      |       | Rp 13,839,089.44     | 96.92% |
| s, Q System | Q    | ROP   |                      |        |
|             | 27.5 | 25.63 | Rp 11,322,997.37     | 96.95% |
|             | 30   | 25.63 | Rp 10,073,851.53     | 97.86% |
|             | 32.3 | 25.63 | Rp 9,080,469.61      | 98.65% |
|             | 35   | 25.63 | Rp 9,250,550.16      | 98.70% |
|             | 37.5 | 25.63 | Rp 8,346,369.38      | 99.29% |
|             | 40   | 25.63 | Rp 10,194,867.52     | 97.86% |
|             | 42.5 | 25.63 | Rp 8,153,223.49      | 99.49% |
|             | 45   | 25.63 | Rp 9,257,419.96      | 98.88% |

Table 5. 2 DC 400 Gr 79 x 109 Total Inventory Cost and Service Level Comparison (continued)

|                | T     | SS    | OUL   | Total Inventory Cost | SL     |
|----------------|-------|-------|-------|----------------------|--------|
|                |       |       |       |                      |        |
| R, s, S System | 5     | 21.48 | 39.18 | Rp 14,405,102.33     | 93.91% |
|                | 10    | 25.77 | 51.62 | Rp 13,503,057.58     | 94.74% |
|                | 15    | 29.44 | 63.44 | Rp 16,332,204.65     | 93.07% |
|                | 19.81 | 32.58 | 74.42 | Rp 15,523,506.45     | 93.87% |
|                | 25    | 35.66 | 85.97 | Rp 15,600,869.20     | 94.22% |
|                | 30    | 38.4  | 96.86 | Rp 17,004,929.28     | 93.66% |
|                | 35    | 40.95 | 107.6 | Rp 17,534,902.35     | 93.57% |
|                | 40    | 43.36 | 118.1 | Rp 18,554,967.70     | 93.52% |

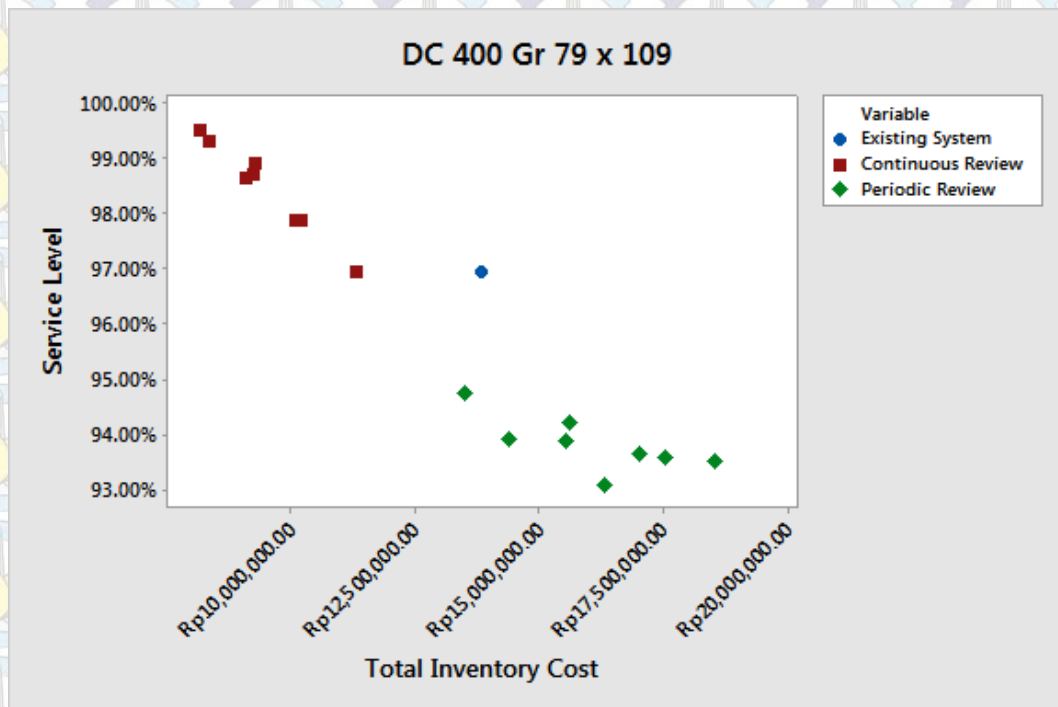


Figure 5. 2 Scatter Plot of DC 400 Gr 79 x 109 Total Inventory Cost Comparison

Different from the previous comparison for raw materials categorized in A class with high value of CV, in Table 5.2, periodic review inventory control system typically does not give better result compared to the existing system. In terms of total inventory cost, it is more expensive; in terms of service level, it results worse and even cannot fulfill specified service level target by the company (95%). By this mean, periodic review inventory control system is not recommended for DC 400 Gr 79 x 109, and the other A class raw materials with low CV value. On the other hand, continuous review inventory control system



shows better result both in total inventory cost and service level hence the recommendation of applying this system for the corresponding raw material type.

When the company decides to replace existing system with continuous review inventory control system (Q equals to 37.5 units), company could save Rp. 5,492,720.06 or equal to 39.69%, cutting down total inventory cost from Rp. 13,839,089.44 to Rp. 8,346,369.38.

#### 5.4 Inventory Control System for DC 250 Gr 89 x 120

Raw material DC 250 Gr 89 x 120 represents other raw materials classified in B class with high value of CV. This raw material contributes 1.56% of the total annual dollar usage, with unit price of Rp. 994,000.00.

From the simulation result, total inventory cost (horizontal) against the service level (vertical) for each inventory control system is presented in Figure 5.3. Table 5.3 recapitulates DC 250 Gr 89 x 120 all scenarios total inventory cost and service level, including the heuristic method results for continuous and periodic review inventory control systems.

Table 5. 3 DC 250 Gr 79 x 109 Total Inventory Cost and Service Level Comparison

| Existing       |  |  |  | Total Inventory Cost |              | SL                           |
|----------------|--|--|--|----------------------|--------------|------------------------------|
|                |  |  |  | Rp                   | 8,178,384.42 | 100%                         |
| s, Q System    |  |  |  | Q                    | ROP          |                              |
|                |  |  |  | 4                    | 3.61         | Rp 4,941,653.21 94.21%       |
|                |  |  |  | 6                    | 3.61         | Rp 4,771,013.53 95.11%       |
|                |  |  |  | 8                    | 3.61         | Rp 4,544,029.13 95.24%       |
|                |  |  |  | 9.56                 | 3.61         | Rp 4,721,966.66 94.76%       |
|                |  |  |  | 12                   | 3.61         | Rp 4,786,273.67 95.11%       |
|                |  |  |  | 14                   | 3.61         | Rp 4,293,710.49 96.68%       |
|                |  |  |  | 16                   | 3.61         | Rp 4,277,787.49 96.61%       |
|                |  |  |  | 18                   | 3.61         | Rp 4,139,402.19 97.16%       |
| R, s, S System |  |  |  | T                    | SS           | OUL                          |
|                |  |  |  | 50                   | 11.05        | 17.36 Rp 3,973,658.04 97.77% |
|                |  |  |  | 60                   | 12.02        | 19.49 Rp 4,396,723.92 95.76% |
|                |  |  |  | 70                   | 12.92        | 21.56 Rp 4,471,118.50 96.97% |
|                |  |  |  | 82.26                | 13.95        | 24.01 Rp 3,515,307.67 99.52% |
|                |  |  |  | 90                   | 14.55        | 25.52 Rp 4,232,556.54 97.38% |
|                |  |  |  | 100                  | 15.31        | 27.43 Rp 4,573,504.80 96.97% |
|                |  |  |  | 110                  | 16.02        | 29.31 Rp 4,748,707.89 96.48% |
|                |  |  |  | 120                  | 16.71        | 31.16 Rp 4,801,699.66 95.92% |

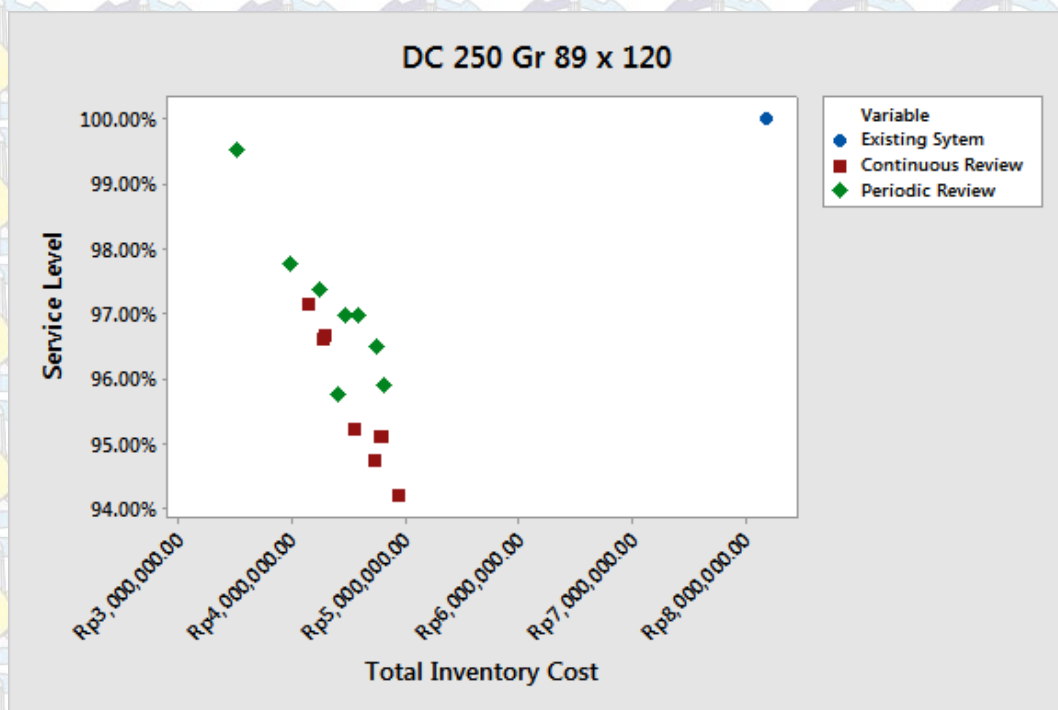


Figure 5. 3 Scatter Plot of DC 250 Gr 89 x 120 Total Inventory Cost Comparison

From Table 5.3, in general, it can be interfered that periodic review inventory control system is more suitable for managing DC 250 Gr 89 x 120, and other raw materials in B class with high value of CV. Even so, continuous review inventory control system is also able to improve the existing system.

With input parameters obtained from calculation using Equation 2.7 to 2.10 in subchapter 2.5.2, periodic review inventory control system application can reduce total inventory cost worth of Rp. 4,663,076.75 or equal to 57.02%, lessen the cost from Rp. 8,178,384.42 to Rp. 3,515,307.67.

### 5.5 Inventory Control System for AC 360 Gr 79 x109

Raw material AC 360 Gr 79 x 109 represents other raw materials classified in B class with low value of CV. This raw material contributes 1.63% of the total annual dollar usage. Compared to DC 250 Gr 89 x 120, this raw material has higher unit price, worth of Rp. 2,092,000.00. The contribution has only a slight difference due to huge gap annual consumption volume between these two raw materials – only 22.22 units of this material are used, while 43.14 units consumed for DC 250 Gr 89 x 120.



From the simulation result, total inventory cost as well as the service level for each inventory control system can be compared in Figure 5.4. Table 5.4 recapitulates AC 360 Gr 79 x 109 all scenarios total inventory cost and service level, including the heuristic method results for continuous and periodic review inventory control systems.

Table 5. 4 AC 360 Gr 79 x 109 Total Inventory Cost and Service Level Comparison

| Existing       |       |      |       | Total Inventory Cost | SL     |
|----------------|-------|------|-------|----------------------|--------|
|                |       |      |       | Rp 8,819,134.20      | 100%   |
| s, Q System    | Q     | ROP  |       |                      |        |
|                | 2     | 1.19 |       | Rp 3,415,617.29      | 98.57% |
|                | 3     | 1.19 |       | Rp 3,356,779.95      | 98.57% |
|                | 4     | 1.19 |       | Rp 2,627,505.41      | 100%   |
|                | 4.77  | 1.19 |       | Rp 2,646,201.48      | 100%   |
|                | 6     | 1.19 |       | Rp 3,339,536.43      | 98.57% |
|                | 7     | 1.19 |       | Rp 2,591,227.43      | 100%   |
|                | 8     | 1.19 |       | Rp 2,637,756.11      | 100%   |
|                | 9     | 1.19 |       | Rp 2,670,537.68      | 100%   |
| R, s, S System | T     | SS   | OUL   |                      |        |
|                | 50    | 3.37 | 6.66  | Rp 3,379,646.27      | 97.73% |
|                | 60    | 3.67 | 7.57  | Rp 3,404,013.90      | 97.73% |
|                | 70    | 3.94 | 8.45  | Rp 4,105,385.62      | 96.30% |
|                | 78.36 | 4.16 | 9.18  | Rp 3,459,672.07      | 97.73% |
|                | 90    | 4.44 | 10.17 | Rp 4,140,550.02      | 96.30% |
|                | 100   | 4.67 | 11.01 | Rp 3,596,593.29      | 97.73% |
|                | 110   | 4.89 | 6.94  | Rp 2,781,649.58      | 100%   |
|                | 120   | 5.1  | 12.66 | Rp 3,439,647.40      | 97.73% |

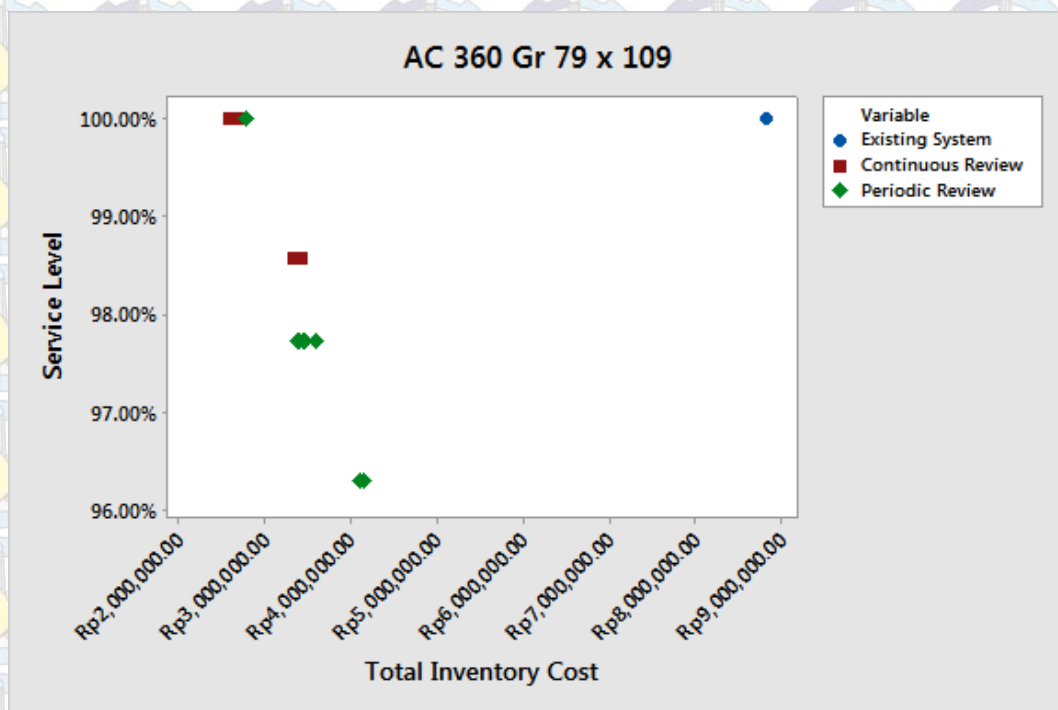


Figure 5. 4 Scatter Plot of AC 360 Gr 79 x 109 Total Inventory Cost Comparison

By looking at Table 5.4, it could be interfered that although periodic review inventory control system is also able to improve the existing system, generally continuous review inventory control system suits better to manage AC 360 Gr 79 x 109, and other raw materials in B class with low value of CV.

A point in Figure 5.4 which is not dominated by any other plots is continuous review inventory control system with the order size of 7 units. This continuous review inventory control system plot can reduce total inventory cost up to Rp. 6,227,906.77 or equal to 70.62%, from Rp. 8,819,134.20 to Rp. 2,591,227.43.

## 5.6 Inventory Control System for AC 230 Gr 79 x 109

Raw material AC 230 Gr 79 x 109 represents other raw materials categorized in least significant class, C class, with high value of CV. This raw material contributes no more than 0.37% of the total annual dollar usage. Although the unit price is not that cheap, at the rate of Rp. 1,406,000.00, the usage of this material is extremely low and lead to small contribution to total annual dollar usage.





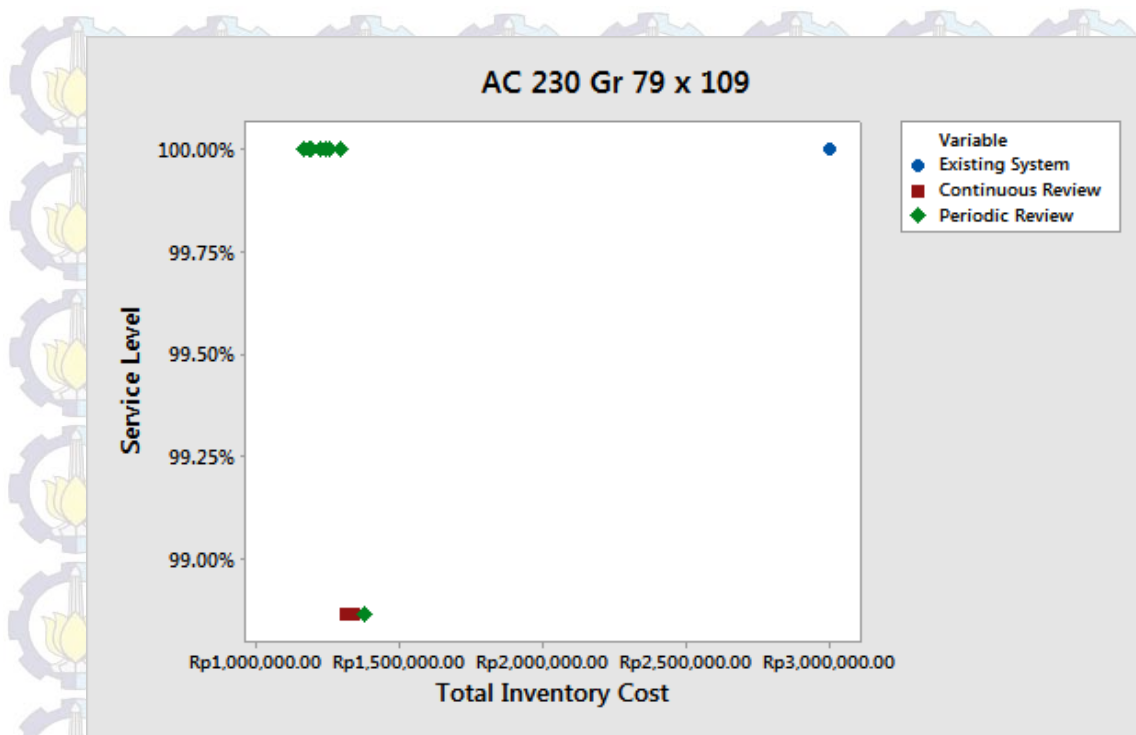


Figure 5. 5 Scatter Plot of AC 230 Gr 79 x 109 Total Inventory Cost Comparison

According to the comparison in Table 5.5, it can be identified that total inventory cost in existing inventory control system is typically larger than total cost in both scenarios, although all orders could be fulfilled. Periodic review inventory system gives relatively cheaper total inventory cost result than continuous review control. Also, in terms of service level, applying periodic review inventory control system outcomes better performance.

When the decision comes to apply periodic review inventory control system with 90 days of review period, company could save Rp. 1,837,159.66 or equal to 61.29% per year, cutting down total inventory cost from Rp. 2,997,677.47.

### 5.7 Inventory Control System for Bontak Sticker 54 x 70

Raw material Bontak Sticker 54 x 70 represents raw materials categorized in C class, with low value of CV. Similar to AC 230 Gr 79 x 109, this raw material contributes 0.37% of the total annual dollar usage. The price of this raw material is Rp. 1,010,000.00 per unit with the total annual consumption of 9.43



units, approximately one a half fold compared to the consumption of AC 230 Gr 79 x 109.

From the simulation result, total inventory cost as well as the service level for each inventory control system can be compared in Figure 5.6. Table 5.6 recapitulates Bontak Sticker 54 x 70 all scenarios total inventory cost and service level, including the heuristic method results for continuous and periodic review inventory control systems.

Table 5. 6 Bontak Sticker 54 x 70 Total Inventory Cost and Service Level Comparison

|                |        |      |      | Total Inventory Cost | SL     |
|----------------|--------|------|------|----------------------|--------|
| Existing       |        |      |      | Rp 3,322,948.53      | 92.39% |
| s, Q System    | Q      | ROP  |      |                      |        |
|                | 1      | 0.43 |      | Rp 5,000,816.85      | 84.13% |
|                | 2      | 0.43 |      | Rp 3,139,406.62      | 91.41% |
|                | 3      | 0.43 |      | Rp 3,603,056.72      | 90.35% |
|                | 4      | 0.43 |      | Rp 3,058,594.93      | 91.92% |
|                | 4.47   | 0.43 |      | Rp 1,560,476.82      | 97.22% |
|                | 5      | 0.43 |      | Rp 1,846,127.14      | 96.35% |
|                | 6      | 0.43 |      | Rp 2,394,384.75      | 94.55% |
|                | 7      | 0.43 |      | Rp 1,913,325.38      | 96.53% |
| R, s, S System | T      | SS   | OUL  |                      |        |
|                | 90     | 2.42 | 4.8  | Rp 2,449,465.37      | 93.86% |
|                | 110    | 2.67 | 5.57 | Rp 1,836,694.13      | 97.22% |
|                | 130    | 2.9  | 6.31 | Rp 1,019,131.01      | 99.31% |
|                | 150    | 3.11 | 7.04 | Rp 1,595,545.55      | 97.92% |
|                | 173.12 | 3.33 | 7.86 | Rp 2,185,952.94      | 96.53% |
|                | 190    | 3.49 | 8.46 | Rp 903,825.52        | 100%   |
|                | 210    | 3.67 | 9.15 | Rp 983,056.79        | 100%   |
|                | 230    | 3.84 | 9.84 | Rp 1,059,535.68      | 100%   |

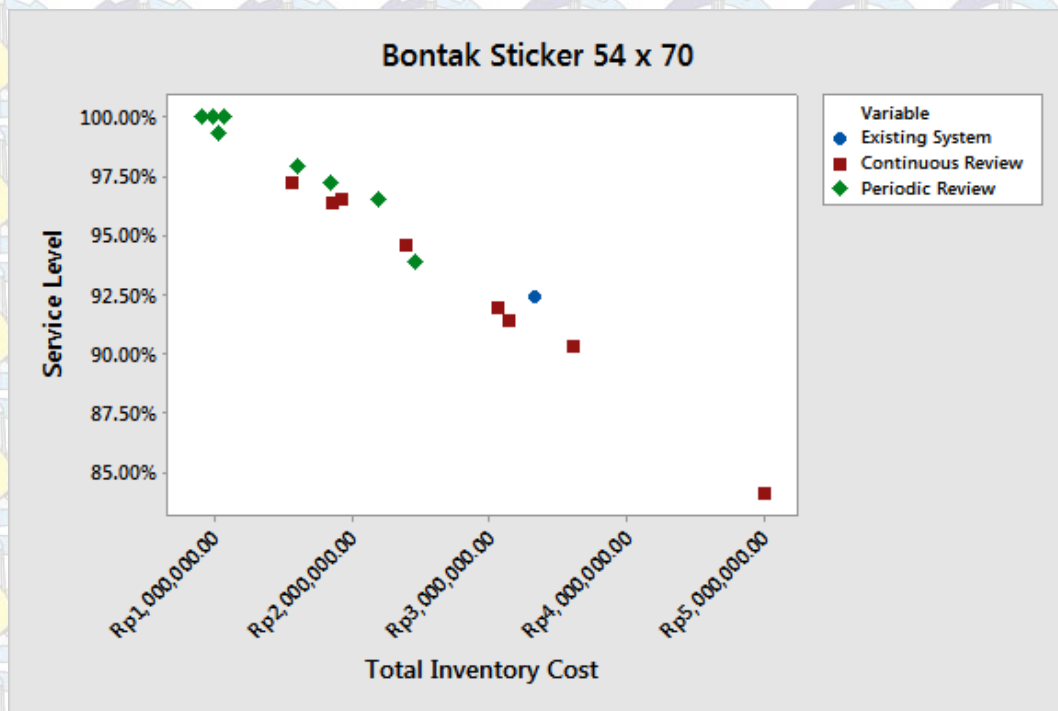


Figure 5. 6 Scatter Plot of Bontak Sticker 54 x 70 Total Inventory Cost Comparison

Comparison in Table 5.6 shows that continuous review inventory control system does not give better result compared to periodic review system in general. It burdens the company with higher total inventory cost and lower service level – the service level even cannot fulfill specified service level target by the company (95%). By this mean, continuous review inventory control system is not recommended for Bontak Sticker 54 x 70, and the other C class raw materials with low *CV* value. On the other hand, periodic review inventory control system is recommended since it shows lower total inventory cost compared to the existing system.

With the review period of 190 days, periodic review inventory control system application can reduce total inventory cost worth of Rp. 2,419,123.01 or equal to 72.8 %, lessen the cost from Rp. 3,322,948.53 to Rp. 903,825.52.

## 5.8 Inventory Cost Reduction and Service Level Comparison

After choosing each inventory control system for each raw material category, then each cost reduction and service level comparison is carried out.



Table 5.7 summarizes the total inventory cost reduction and compares service level in each raw material category.

Table 5. 7 Recapitulation of Inventory Cost Reduction and Service Level Comparison

| Class | CV   | Inventory Control System Chosen | Total Inventory Cost Reduction | Service Level |                |
|-------|------|---------------------------------|--------------------------------|---------------|----------------|
|       |      |                                 |                                | Existing      | Recommendation |
| A     | High | Periodic                        | 72.85%                         | 100%          | 98.48%         |
|       | Low  | Continuous                      | 39.69%                         | 96.92%        | 99.29%         |
| B     | High | Periodic                        | 57.02%                         | 100%          | 99.52%         |
|       | Low  | Continuous                      | 70.62%                         | 100%          | 100%           |
| C     | High | Periodic                        | 61.29%                         | 100%          | 100%           |
|       | Low  | Periodic                        | 72.80%                         | 92.39%        | 100%           |

On the report of Table 5.7, all raw material categories are improved significantly in terms of total inventory cost. Except for A class and B class with high CV value, the service level is also enhanced, or at least the same. However, the decrease in service level is not sensitive to the decision since it is still above the specified target service level of 95%.

In existing condition, total inventory cost is frantically high due to two main factors. The first factor is that the company has no specification on when and how many units the raw materials have to be purchased; it suffers the company for stocking too much raw materials in some specific time, while losing orders in the others. The second factor is that the company has a tendency not to consider holding cost as one of the inventory cost elements. Consequently, company overestimates the order size, which leads to high holding cost, as a result of great volume of inventory on hand.



## **CHAPTER VI**

### **CONCLUSION AND RECOMMENDATION**

This chapter concludes the whole research and contains recommendations for further researches as well as for the company.

#### **6.1 Conclusion**

After conducting this research, several conclusions to present are:

1. The scenarios generated in this research have been able to evaluate several possible inventory control system method and recommend the most efficient inventory control system for each raw material category. Continuous review inventory control system is chosen for A class raw materials with low CV value and B class raw materials with low CV value, while periodic review inventory control system is chosen for A class raw materials with high CV value, B class raw materials with high CV value, and all C class raw materials.
2. Other than total inventory cost reduction, service level is also considered in this study. When different proposed inventory control system is applied to the category, new service level is obtained. For A class raw materials with high CV value, the cost is reduced by 72.85% with the service level of 98.48%; For A class raw materials with low CV value, the cost is reduced by 39.69% with the service level of 99.29%; For B class raw materials with high CV value, the cost is reduced by 57.02% with the service level of 99.52%; For B class raw materials with low CV value, the cost is reduced by 70.62% with the service level of 100%; For C class raw materials with high CV value, the cost is reduced by 61.29% with the service level of 100%; For C class raw materials with low CV value, the cost is reduced by 72.8% with the service level of 100%. All the chosen inventory control system service levels exceed 95% so that it can fulfill the target service level specified by the company.



## 6.2 Recommendation

For future research, it is prudent from this research to:

1. Build the Decision Supporting System so that it could be easily used for the company when they are willing to use new raw material type in the business.
2. Evaluate continuous review heuristic method in terms of both reorder point and order size.
3. Extend the heuristic method for both continuous and periodic review inventory control system, hence exact global optimum solution can be obtained.



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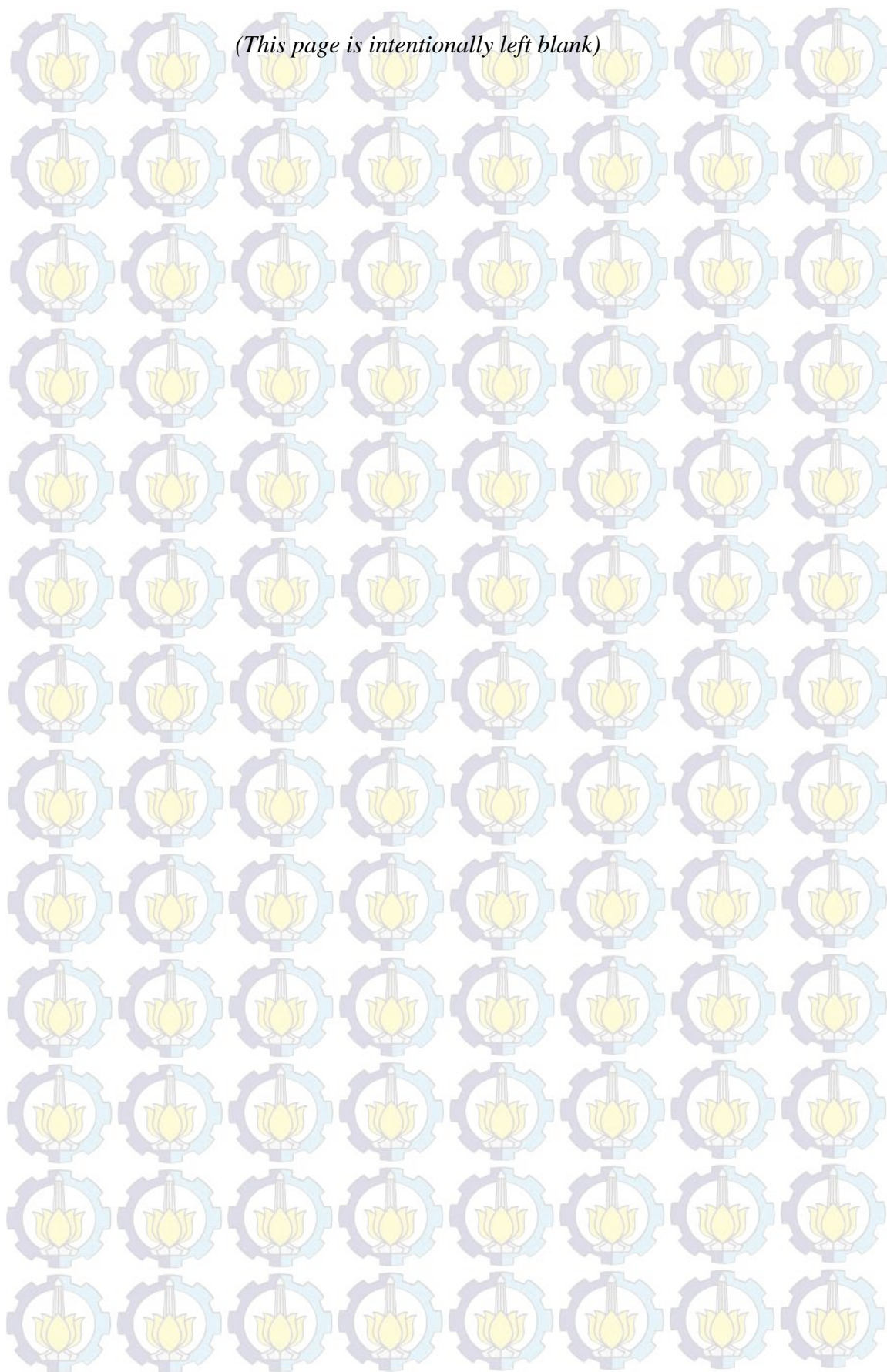
## APPENDIX A

### ORDER COST BREAKDOWN AND CALCULATION

| Month             | Electricity Bill | Telephone Bill  | Equipment and Utilities Expense | Labor Cost      | Total            | Number of Order |
|-------------------|------------------|-----------------|---------------------------------|-----------------|------------------|-----------------|
| January           | Rp 469,868.00    | Rp 624,720.00   | Rp 798,400.00                   | Rp 4,500,000.00 | Rp 6,392,988.00  | 61              |
| February          | Rp 517,340.00    | Rp 978,920.00   | Rp 2,126,400.00                 | Rp 4,500,000.00 | Rp 8,122,660.00  | 61              |
| March             | Rp 442,484.00    | Rp 935,120.00   | Rp 1,295,650.00                 | Rp 4,500,000.00 | Rp 7,173,254.00  | 81              |
| April             | Rp 607,920.00    | Rp 935,120.00   | Rp 1,025,000.00                 | Rp 4,500,000.00 | Rp 7,068,040.00  | 59              |
| May               | Rp 505,960.00    | Rp 1,370,560.00 | Rp 410,500.00                   | Rp 4,500,000.00 | Rp 6,787,020.00  | 43              |
| June              | Rp 427,980.00    | Rp 941,600.00   | Rp 830,550.00                   | Rp 4,500,000.00 | Rp 6,700,130.00  | 55              |
| July              | Rp 484,808.00    | Rp 939,600.00   | Rp 295,700.00                   | Rp 4,500,000.00 | Rp 6,220,108.00  | 39              |
| August            | Rp 422,184.00    | Rp 983,440.00   | Rp 709,500.00                   | Rp 4,500,000.00 | Rp 6,615,124.00  | 37              |
| September         | Rp 342,632.00    | Rp 939,600.00   | Rp 377,850.00                   | Rp 4,500,000.00 | Rp 6,160,082.00  | 45              |
| October           | Rp 439,388.00    | Rp 983,440.00   | Rp 598,000.00                   | Rp 4,500,000.00 | Rp 6,520,828.00  | 57              |
| November          | Rp 385,372.00    | Rp 939,600.00   | Rp 635,250.00                   | Rp 4,500,000.00 | Rp 6,460,222.00  | 28              |
| December          | Rp 311,532.00    | Rp 939,600.00   | Rp 542,500.00                   | Rp 4,500,000.00 | Rp 6,293,632.00  | 45              |
|                   |                  |                 |                                 |                 | Rp 80,514,088.00 | 611             |
| <b>Order Cost</b> |                  |                 |                                 |                 |                  | Rp 131,774.28   |



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## APPENDIX B

### EXISTING SYSTEM REPLICATION (AC 260 Gr 79 x 109)

#### Replication1

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |      | 9.84   | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 10-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 11-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 12-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 13-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 14-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 15-Jan-15 | 10.9  |      | 0      | 74.91             | Rp 131,774.28 |                | Rp 57,386.30 | Rp 189,160.58        |
| 16-Jan-15 |       |      | 0      | 74.91             |               |                | Rp 57,386.30 | Rp 57,386.30         |
| 17-Jan-15 |       | 10.9 | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 18-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 19-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 20-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 21-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 22-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 23-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 24-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 25-Jan-15 |       |      | 0      | 85.81             |               |                | Rp 65,736.47 | Rp 65,736.47         |
| 26-Jan-15 |       |      | 0.89   | 84.92             |               |                | Rp 65,054.66 | Rp 65,054.66         |
| 27-Jan-15 |       |      | 0      | 84.92             |               |                | Rp 65,054.66 | Rp 65,054.66         |
| 28-Jan-15 |       |      | 0      | 84.92             |               |                | Rp 65,054.66 | Rp 65,054.66         |
| 29-Jan-15 |       |      | 0      | 84.92             |               |                | Rp 65,054.66 | Rp 65,054.66         |
| 30-Jan-15 |       |      | 0      | 84.92             |               |                | Rp 65,054.66 | Rp 65,054.66         |
| 31-Jan-15 | 10.9  |      | 0      | 84.92             | Rp 131,774.28 |                | Rp 65,054.66 | Rp 196,828.94        |
| 1-Feb-15  |       |      | 0      | 84.92             |               |                | Rp 65,054.66 | Rp 65,054.66         |
| 2-Feb-15  |       | 10.9 | 0      | 95.82             |               |                | Rp 73,404.83 | Rp 73,404.83         |
| 3-Feb-15  |       |      | 0      | 95.82             |               |                | Rp 73,404.83 | Rp 73,404.83         |
| 4-Feb-15  |       |      | 1.85   | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 5-Feb-15  |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 6-Feb-15  |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 7-Feb-15  |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 8-Feb-15  |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 9-Feb-15  |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 10-Feb-15 |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 11-Feb-15 |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 12-Feb-15 |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 13-Feb-15 |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 14-Feb-15 |       |      | 0      | 93.97             |               |                | Rp 71,987.60 | Rp 71,987.60         |
| 15-Feb-15 | 10.9  |      | 0.29   | 93.68             | Rp 131,774.28 |                | Rp 71,765.44 | Rp 203,539.72        |
| 16-Feb-15 |       |      | 0      | 93.68             |               |                | Rp 71,765.44 | Rp 71,765.44         |
| 17-Feb-15 |       | 10.9 | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 18-Feb-15 |       |      | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 19-Feb-15 |       |      | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 20-Feb-15 |       |      | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 21-Feb-15 |       |      | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 22-Feb-15 |       |      | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 23-Feb-15 |       |      | 0      | 104.58            |               |                | Rp 80,115.60 | Rp 80,115.60         |
| 24-Feb-15 |       |      | 16.29  | 88.29             |               |                | Rp 67,636.32 | Rp 67,636.32         |
| 25-Feb-15 |       |      | 0      | 88.29             |               |                | Rp 67,636.32 | Rp 67,636.32         |
| 26-Feb-15 |       |      | 0      | 88.29             |               |                | Rp 67,636.32 | Rp 67,636.32         |
| 27-Feb-15 |       |      | 0      | 88.29             |               |                | Rp 67,636.32 | Rp 67,636.32         |
| 28-Feb-15 | 10.9  |      | 0      | 88.29             | Rp 131,774.28 |                | Rp 67,636.32 | Rp 199,410.60        |
| 1-Mar-15  |       |      | 0      | 88.29             |               |                | Rp 67,636.32 | Rp 67,636.32         |
| 2-Mar-15  |       | 10.9 | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |
| 3-Mar-15  |       |      | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 4-Mar-15  |       |      | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |
| 5-Mar-15  |       |      | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |
| 6-Mar-15  |       |      | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |
| 7-Mar-15  |       |      | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |
| 8-Mar-15  |       |      | 0      | 99.19             |               |                | Rp 75,986.48 | Rp 75,986.48         |
| 9-Mar-15  |       |      | 7.74   | 91.45             |               |                | Rp 70,057.10 | Rp 70,057.10         |
| 10-Mar-15 |       |      | 0      | 91.45             |               |                | Rp 70,057.10 | Rp 70,057.10         |
| 11-Mar-15 |       |      | 2.32   | 89.13             |               |                | Rp 68,279.82 | Rp 68,279.82         |
| 12-Mar-15 |       |      | 0      | 89.13             |               |                | Rp 68,279.82 | Rp 68,279.82         |
| 13-Mar-15 |       |      | 0      | 89.13             |               |                | Rp 68,279.82 | Rp 68,279.82         |
| 14-Mar-15 |       |      | 0      | 89.13             |               |                | Rp 68,279.82 | Rp 68,279.82         |
| 15-Mar-15 | 10.9  |      | 0      | 89.13             | Rp 131,774.28 |                | Rp 68,279.82 | Rp 200,054.10        |
| 16-Mar-15 |       |      | 0      | 89.13             |               |                | Rp 68,279.82 | Rp 68,279.82         |
| 17-Mar-15 |       |      | 0      | 89.13             |               |                | Rp 68,279.82 | Rp 68,279.82         |
| 18-Mar-15 |       | 10.9 | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 19-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 20-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 21-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 22-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 23-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 24-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 25-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 26-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 27-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 28-Mar-15 |       |      | 0      | 100.03            |               |                | Rp 76,629.98 | Rp 76,629.98         |
| 29-Mar-15 |       |      | 4.82   | 95.21             |               |                | Rp 72,937.52 | Rp 72,937.52         |
| 30-Mar-15 |       |      | 2.06   | 93.15             |               |                | Rp 71,359.42 | Rp 71,359.42         |
| 31-Mar-15 | 10.9  |      | 0      | 93.15             | Rp 131,774.28 |                | Rp 71,359.42 | Rp 203,133.70        |
| 1-Apr-15  |       |      | 0      | 93.15             |               |                | Rp 71,359.42 | Rp 71,359.42         |
| 2-Apr-15  |       | 10.9 | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 3-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 4-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 5-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 6-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 7-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 8-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 9-Apr-15  |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 10-Apr-15 |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 11-Apr-15 |       |      | 0      | 104.05            |               |                | Rp 79,709.58 | Rp 79,709.58         |
| 12-Apr-15 |       |      | 2.91   | 101.14            |               |                | Rp 77,480.32 | Rp 77,480.32         |
| 13-Apr-15 |       |      | 0      | 101.14            |               |                | Rp 77,480.32 | Rp 77,480.32         |
| 14-Apr-15 |       |      | 0      | 101.14            |               |                | Rp 77,480.32 | Rp 77,480.32         |
| 15-Apr-15 | 10.9  |      | 0      | 101.14            | Rp 131,774.28 |                | Rp 77,480.32 | Rp 209,254.60        |
| 16-Apr-15 |       |      | 0      | 101.14            |               |                | Rp 77,480.32 | Rp 77,480.32         |
| 17-Apr-15 |       | 10.9 | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 18-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 19-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 20-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 21-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 22-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 23-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 24-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 25-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 26-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 27-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 28-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 29-Apr-15 |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 30-Apr-15 | 10.9  |      | 0      | 112.04            | Rp 131,774.28 |                | Rp 85,830.48 | Rp 217,604.76        |
| 1-May-15  |       |      | 0      | 112.04            |               |                | Rp 85,830.48 | Rp 85,830.48         |
| 2-May-15  |       | 10.9 | 0      | 122.94            |               |                | Rp 94,180.65 | Rp 94,180.65         |
| 3-May-15  |       |      | 0      | 122.94            |               |                | Rp 94,180.65 | Rp 94,180.65         |
| 4-May-15  |       |      | 0.61   | 122.33            |               |                | Rp 93,713.34 | Rp 93,713.34         |
| 5-May-15  |       |      | 0      | 122.33            |               |                | Rp 93,713.34 | Rp 93,713.34         |
| 6-May-15  |       |      | 0      | 122.33            |               |                | Rp 93,713.34 | Rp 93,713.34         |
| 7-May-15  |       |      | 17.57  | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 8-May-15  |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 9-May-15  |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 10-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 11-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 12-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 13-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 14-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49 | Rp 80,253.49         |
| 15-May-15 | 10.9  |      | 0      | 104.76            | Rp 131,774.28 |                | Rp 80,253.49 | Rp 212,027.77        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 16-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49  | Rp 80,253.49         |
| 17-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49  | Rp 80,253.49         |
| 18-May-15 |       |      | 0      | 104.76            |               |                | Rp 80,253.49  | Rp 80,253.49         |
| 19-May-15 |       | 10.9 | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 20-May-15 |       |      | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 21-May-15 |       |      | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 22-May-15 |       |      | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 23-May-15 |       |      | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 24-May-15 |       |      | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 25-May-15 |       |      | 0      | 115.66            |               |                | Rp 88,603.66  | Rp 88,603.66         |
| 26-May-15 |       |      | 3.61   | 112.05            |               |                | Rp 85,838.14  | Rp 85,838.14         |
| 27-May-15 |       |      | 0      | 112.05            |               |                | Rp 85,838.14  | Rp 85,838.14         |
| 28-May-15 |       |      | 0      | 112.05            |               |                | Rp 85,838.14  | Rp 85,838.14         |
| 29-May-15 |       |      | 0      | 112.05            |               |                | Rp 85,838.14  | Rp 85,838.14         |
| 30-May-15 |       |      | 0      | 112.05            |               |                | Rp 85,838.14  | Rp 85,838.14         |
| 31-May-15 | 10.9  |      | 0      | 112.05            | Rp 131,774.28 |                | Rp 85,838.14  | Rp 217,612.42        |
| 1-Jun-15  |       |      | 0      | 112.05            |               |                | Rp 85,838.14  | Rp 85,838.14         |
| 2-Jun-15  |       | 10.9 | 0      | 122.95            |               |                | Rp 94,188.31  | Rp 94,188.31         |
| 3-Jun-15  |       |      | 0      | 122.95            |               |                | Rp 94,188.31  | Rp 94,188.31         |
| 4-Jun-15  |       |      | 1      | 121.95            |               |                | Rp 93,422.24  | Rp 93,422.24         |
| 5-Jun-15  |       |      | 0      | 121.95            |               |                | Rp 93,422.24  | Rp 93,422.24         |
| 6-Jun-15  |       |      | 0      | 121.95            |               |                | Rp 93,422.24  | Rp 93,422.24         |
| 7-Jun-15  |       |      | 0      | 121.95            |               |                | Rp 93,422.24  | Rp 93,422.24         |
| 8-Jun-15  |       |      | 0      | 121.95            |               |                | Rp 93,422.24  | Rp 93,422.24         |
| 9-Jun-15  |       |      | 0      | 121.95            |               |                | Rp 93,422.24  | Rp 93,422.24         |
| 10-Jun-15 |       |      | 8.07   | 113.88            |               |                | Rp 87,240.05  | Rp 87,240.05         |
| 11-Jun-15 |       |      | 0      | 113.88            |               |                | Rp 87,240.05  | Rp 87,240.05         |
| 12-Jun-15 |       |      | 0      | 113.88            |               |                | Rp 87,240.05  | Rp 87,240.05         |
| 13-Jun-15 |       |      | 0      | 113.88            |               |                | Rp 87,240.05  | Rp 87,240.05         |
| 14-Jun-15 |       |      | 0      | 113.88            |               |                | Rp 87,240.05  | Rp 87,240.05         |
| 15-Jun-15 | 10.9  |      | 0      | 113.88            | Rp 131,774.28 |                | Rp 87,240.05  | Rp 219,014.33        |
| 16-Jun-15 |       | 10.9 | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 17-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 18-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 19-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 20-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 21-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 22-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 23-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 24-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 25-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 26-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 27-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 28-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 29-Jun-15 |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 30-Jun-15 | 10.9  |      | 0      | 124.78            | Rp 131,774.28 |                | Rp 95,590.21  | Rp 227,364.49        |
| 1-Jul-15  |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 2-Jul-15  |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 3-Jul-15  |       |      | 0      | 124.78            |               |                | Rp 95,590.21  | Rp 95,590.21         |
| 4-Jul-15  |       | 10.9 | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 5-Jul-15  |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 6-Jul-15  |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 7-Jul-15  |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 8-Jul-15  |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 9-Jul-15  |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 10-Jul-15 |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 11-Jul-15 |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 12-Jul-15 |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 13-Jul-15 |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 14-Jul-15 |       |      | 0      | 135.68            |               |                | Rp 103,940.38 | Rp 103,940.38        |
| 15-Jul-15 | 10.9  |      | 0      | 135.68            | Rp 131,774.28 |                | Rp 103,940.38 | Rp 235,714.66        |
| 16-Jul-15 |       |      | 2.95   | 132.73            |               |                | Rp 101,680.47 | Rp 101,680.47        |
| 17-Jul-15 |       |      | 0      | 132.73            |               |                | Rp 101,680.47 | Rp 101,680.47        |
| 18-Jul-15 |       | 10.9 | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 19-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 20-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 21-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 22-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 23-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 24-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 25-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 26-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 27-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 28-Jul-15 |       |      | 0      | 143.63            |               |                | Rp 110,030.63 | Rp 110,030.63        |
| 29-Jul-15 |       |      | 1.21   | 142.42            |               |                | Rp 109,103.69 | Rp 109,103.69        |
| 30-Jul-15 |       |      | 0      | 142.42            |               |                | Rp 109,103.69 | Rp 109,103.69        |
| 31-Jul-15 | 10.9  |      | 0      | 142.42            | Rp 131,774.28 |                | Rp 109,103.69 | Rp 240,877.97        |
| 1-Aug-15  |       |      | 0      | 142.42            |               |                | Rp 109,103.69 | Rp 109,103.69        |
| 2-Aug-15  |       | 10.9 | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 3-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 4-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 5-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 6-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 7-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 8-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 9-Aug-15  |       |      | 0      | 153.32            |               |                | Rp 117,453.85 | Rp 117,453.85        |
| 10-Aug-15 |       |      | 1.05   | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 11-Aug-15 |       |      | 0      | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 12-Aug-15 |       |      | 0      | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 13-Aug-15 |       |      | 0      | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 14-Aug-15 |       |      | 0      | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 15-Aug-15 | 10.9  |      | 0      | 152.27            | Rp 131,774.28 |                | Rp 116,649.48 | Rp 248,423.76        |
| 16-Aug-15 |       |      | 0      | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 17-Aug-15 |       |      | 0      | 152.27            |               |                | Rp 116,649.48 | Rp 116,649.48        |
| 18-Aug-15 |       | 10.9 | 0      | 163.17            |               |                | Rp 124,999.64 | Rp 124,999.64        |
| 19-Aug-15 |       |      | 0      | 163.17            |               |                | Rp 124,999.64 | Rp 124,999.64        |
| 20-Aug-15 |       |      | 0      | 163.17            |               |                | Rp 124,999.64 | Rp 124,999.64        |
| 21-Aug-15 |       |      | 0      | 163.17            |               |                | Rp 124,999.64 | Rp 124,999.64        |
| 22-Aug-15 |       |      | 1.33   | 161.84            |               |                | Rp 123,980.77 | Rp 123,980.77        |
| 23-Aug-15 |       |      | 0      | 161.84            |               |                | Rp 123,980.77 | Rp 123,980.77        |
| 24-Aug-15 |       |      | 0      | 161.84            |               |                | Rp 123,980.77 | Rp 123,980.77        |
| 25-Aug-15 |       |      | 1.65   | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 26-Aug-15 |       |      | 0      | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 27-Aug-15 |       |      | 0      | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 28-Aug-15 |       |      | 0      | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 29-Aug-15 |       |      | 0      | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 30-Aug-15 |       |      | 0      | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 31-Aug-15 | 10.9  |      | 0      | 160.19            | Rp 131,774.28 |                | Rp 122,716.75 | Rp 254,491.03        |
| 1-Sep-15  |       |      | 0      | 160.19            |               |                | Rp 122,716.75 | Rp 122,716.75        |
| 2-Sep-15  |       | 10.9 | 0      | 171.09            |               |                | Rp 131,066.92 | Rp 131,066.92        |
| 3-Sep-15  |       |      | 0      | 171.09            |               |                | Rp 131,066.92 | Rp 131,066.92        |
| 4-Sep-15  |       |      | 0      | 171.09            |               |                | Rp 131,066.92 | Rp 131,066.92        |
| 5-Sep-15  |       |      | 3.48   | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 6-Sep-15  |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 7-Sep-15  |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 8-Sep-15  |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 9-Sep-15  |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 10-Sep-15 |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 11-Sep-15 |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 12-Sep-15 |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 13-Sep-15 |       |      | 0      | 167.61            |               |                | Rp 128,400.99 | Rp 128,400.99        |
| 14-Sep-15 |       |      | 0.29   | 167.32            |               |                | Rp 128,178.83 | Rp 128,178.83        |
| 15-Sep-15 | 10.9  |      | 0      | 167.32            | Rp 131,774.28 |                | Rp 128,178.83 | Rp 259,953.11        |
| 16-Sep-15 |       |      | 0      | 167.32            |               |                | Rp 128,178.83 | Rp 128,178.83        |
| 17-Sep-15 |       |      | 0      | 167.32            |               |                | Rp 128,178.83 | Rp 128,178.83        |
| 18-Sep-15 |       | 10.9 | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 19-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 20-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 21-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 22-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 23-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 24-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 25-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 26-Sep-15 |       |      | 0      | 178.22            |               |                | Rp 136,529.00 | Rp 136,529.00        |
| 27-Sep-15 |       |      | 2.65   | 175.57            |               |                | Rp 134,498.91 | Rp 134,498.91        |
| 28-Sep-15 |       |      | 0      | 175.57            |               |                | Rp 134,498.91 | Rp 134,498.91        |
| 29-Sep-15 |       |      | 0      | 175.57            |               |                | Rp 134,498.91 | Rp 134,498.91        |
| 30-Sep-15 | 10.9  |      | 0      | 175.57            | Rp 131,774.28 |                | Rp 134,498.91 | Rp 266,273.19        |
| 1-Oct-15  |       |      | 0      | 175.57            |               |                | Rp 134,498.91 | Rp 134,498.91        |
| 2-Oct-15  |       | 10.9 | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 3-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 4-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 5-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 6-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 7-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 8-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 9-Oct-15  |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 10-Oct-15 |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 11-Oct-15 |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 12-Oct-15 |       |      | 0      | 186.47            |               |                | Rp 142,849.07 | Rp 142,849.07        |
| 13-Oct-15 |       |      | 1.21   | 185.26            |               |                | Rp 141,922.13 | Rp 141,922.13        |
| 14-Oct-15 |       |      | 0      | 185.26            |               |                | Rp 141,922.13 | Rp 141,922.13        |
| 15-Oct-15 | 10.9  |      | 3.86   | 181.4             | Rp 131,774.28 |                | Rp 138,965.10 | Rp 270,739.38        |
| 16-Oct-15 |       |      | 0      | 181.4             |               |                | Rp 138,965.10 | Rp 138,965.10        |
| 17-Oct-15 |       |      | 0      | 181.4             |               |                | Rp 138,965.10 | Rp 138,965.10        |
| 18-Oct-15 |       | 10.9 | 0      | 192.3             |               |                | Rp 147,315.26 | Rp 147,315.26        |
| 19-Oct-15 |       |      | 0      | 192.3             |               |                | Rp 147,315.26 | Rp 147,315.26        |
| 20-Oct-15 |       |      | 5.74   | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 21-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 22-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 23-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 24-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 25-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 26-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 27-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 28-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 29-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 30-Oct-15 |       |      | 0      | 186.56            |               |                | Rp 142,918.02 | Rp 142,918.02        |
| 31-Oct-15 | 10.9  |      | 0      | 186.56            | Rp 131,774.28 |                | Rp 142,918.02 | Rp 274,692.30        |
| 1-Nov-15  |       | 10.9 | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 2-Nov-15  |       |      | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 3-Nov-15  |       |      | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 4-Nov-15  |       |      | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 5-Nov-15  |       |      | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 6-Nov-15  |       |      | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 7-Nov-15  |       |      | 0      | 197.46            |               |                | Rp 151,268.18 | Rp 151,268.18        |
| 8-Nov-15  |       |      | 1.29   | 196.17            |               |                | Rp 150,279.95 | Rp 150,279.95        |
| 9-Nov-15  |       |      | 0      | 196.17            |               |                | Rp 150,279.95 | Rp 150,279.95        |
| 10-Nov-15 |       |      | 0.95   | 195.22            |               |                | Rp 149,552.19 | Rp 149,552.19        |
| 11-Nov-15 |       |      | 0      | 195.22            |               |                | Rp 149,552.19 | Rp 149,552.19        |
| 12-Nov-15 |       |      | 0      | 195.22            |               |                | Rp 149,552.19 | Rp 149,552.19        |
| 13-Nov-15 |       |      | 0      | 195.22            |               |                | Rp 149,552.19 | Rp 149,552.19        |
| 14-Nov-15 |       |      | 0      | 195.22            |               |                | Rp 149,552.19 | Rp 149,552.19        |
| 15-Nov-15 | 10.9  |      | 0      | 195.22            | Rp 131,774.28 |                | Rp 149,552.19 | Rp 281,326.47        |
| 16-Nov-15 |       |      | 0      | 195.22            |               |                | Rp 149,552.19 | Rp 149,552.19        |
| 17-Nov-15 |       | 10.9 | 0.53   | 205.59            |               |                | Rp 157,496.33 | Rp 157,496.33        |
| 18-Nov-15 |       |      | 0      | 205.59            |               |                | Rp 157,496.33 | Rp 157,496.33        |
| 19-Nov-15 |       |      | 0      | 205.59            |               |                | Rp 157,496.33 | Rp 157,496.33        |
| 20-Nov-15 |       |      | 0      | 205.59            |               |                | Rp 157,496.33 | Rp 157,496.33        |
| 21-Nov-15 |       |      | 0      | 205.59            |               |                | Rp 157,496.33 | Rp 157,496.33        |
| 22-Nov-15 |       |      | 8.24   | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 23-Nov-15 |       |      | 0      | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 24-Nov-15 |       |      | 0      | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 25-Nov-15 |       |      | 0      | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 26-Nov-15 |       |      | 0      | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 27-Nov-15 |       |      | 0      | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 28-Nov-15 |       |      | 0      | 197.35            |               |                | Rp 151,183.91 | Rp 151,183.91        |
| 29-Nov-15 |       |      | 0.97   | 196.38            |               |                | Rp 150,440.83 | Rp 150,440.83        |
| 30-Nov-15 | 10.9  |      | 0      | 196.38            | Rp 131,774.28 |                | Rp 150,440.83 | Rp 282,215.11        |
| 1-Dec-15  |       |      | 0      | 196.38            |               |                | Rp 150,440.83 | Rp 150,440.83        |
| 2-Dec-15  |       |      | 0      | 196.38            |               |                | Rp 150,440.83 | Rp 150,440.83        |
| 3-Dec-15  |       |      | 0      | 196.38            |               |                | Rp 150,440.83 | Rp 150,440.83        |
| 4-Dec-15  |       |      | 0      | 196.38            |               |                | Rp 150,440.83 | Rp 150,440.83        |
| 5-Dec-15  |       |      | 0      | 196.38            |               |                | Rp 150,440.83 | Rp 150,440.83        |
| 6-Dec-15  |       | 10.9 | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 7-Dec-15  |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 8-Dec-15  |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 9-Dec-15  |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 10-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 11-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 12-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 13-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 14-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 15-Dec-15 | 10.9  |      | 0      | 207.28            | Rp 131,774.28 |                | Rp 158,790.99 | Rp 290,565.27        |
| 16-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 17-Dec-15 |       |      | 0      | 207.28            |               |                | Rp 158,790.99 | Rp 158,790.99        |
| 18-Dec-15 |       | 10.9 | 0.34   | 217.84            |               |                | Rp 166,880.69 | Rp 166,880.69        |
| 19-Dec-15 |       |      | 0      | 217.84            |               |                | Rp 166,880.69 | Rp 166,880.69        |
| 20-Dec-15 |       |      | 0      | 217.84            |               |                | Rp 166,880.69 | Rp 166,880.69        |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|---------------|----------------------|
| 21-Dec-15 |       |    | 0      | 217.84            |            |                | Rp 166,880.69 | Rp 166,880.69        |
| 22-Dec-15 |       |    | 0      | 217.84            |            |                | Rp 166,880.69 | Rp 166,880.69        |
| 23-Dec-15 |       |    | 0      | 217.84            |            |                | Rp 166,880.69 | Rp 166,880.69        |
| 24-Dec-15 |       |    | 0      | 217.84            |            |                | Rp 166,880.69 | Rp 166,880.69        |
| 25-Dec-15 |       |    | 0      | 217.84            |            |                | Rp 166,880.69 | Rp 166,880.69        |
| 26-Dec-15 |       |    | 0.14   | 217.7             |            |                | Rp 166,773.44 | Rp 166,773.44        |
| 27-Dec-15 |       |    | 0      | 217.7             |            |                | Rp 166,773.44 | Rp 166,773.44        |
| 28-Dec-15 |       |    | 0      | 217.7             |            |                | Rp 166,773.44 | Rp 166,773.44        |
| 29-Dec-15 |       |    | 0      | 217.7             |            |                | Rp 166,773.44 | Rp 166,773.44        |
| 30-Dec-15 |       |    | 0      | 217.7             |            |                | Rp 166,773.44 | Rp 166,773.44        |
| 31-Dec-15 |       |    | 0      | 217.7             |            |                | Rp 166,773.44 | Rp 166,773.44        |
|           |       |    |        |                   |            |                |               | Rp 42,183,290.20     |

## Replication 2

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |      | 0.25   | 84.5              |               |                | Rp 64,732.92 | Rp 64,732.92         |
| 5-Jan-15  |       |      | 0      | 84.5              |               |                | Rp 64,732.92 | Rp 64,732.92         |
| 6-Jan-15  |       |      | 0      | 84.5              |               |                | Rp 64,732.92 | Rp 64,732.92         |
| 7-Jan-15  |       |      | 1.01   | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 8-Jan-15  |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 9-Jan-15  |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 10-Jan-15 |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 11-Jan-15 |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 12-Jan-15 |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 13-Jan-15 |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 14-Jan-15 |       |      | 0      | 83.49             |               |                | Rp 63,959.18 | Rp 63,959.18         |
| 15-Jan-15 | 10.9  |      | 3.23   | 80.26             | Rp 131,774.28 |                | Rp 61,484.78 | Rp 193,259.06        |
| 16-Jan-15 |       |      | 0      | 80.26             |               |                | Rp 61,484.78 | Rp 61,484.78         |
| 17-Jan-15 |       |      | 0      | 80.26             |               |                | Rp 61,484.78 | Rp 61,484.78         |
| 18-Jan-15 |       | 10.9 | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 19-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 20-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 21-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 22-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 23-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 24-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 25-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 26-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 27-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 28-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 29-Jan-15 |       |      | 0      | 91.16             |               |                | Rp 69,834.94 | Rp 69,834.94         |
| 30-Jan-15 |       |      | 1.5    | 89.66             |               |                | Rp 68,685.84 | Rp 68,685.84         |
| 31-Jan-15 | 10.9  |      | 0      | 89.66             | Rp 131,774.28 |                | Rp 68,685.84 | Rp 200,460.12        |
| 1-Feb-15  |       |      | 0      | 89.66             |               |                | Rp 68,685.84 | Rp 68,685.84         |
| 2-Feb-15  |       | 10.9 | 0      | 100.56            |               |                | Rp 77,036.00 | Rp 77,036.00         |
| 3-Feb-15  |       |      | 1.17   | 99.39             |               |                | Rp 76,139.70 | Rp 76,139.70         |
| 4-Feb-15  |       |      | 2.09   | 97.3              |               |                | Rp 74,538.61 | Rp 74,538.61         |
| 5-Feb-15  |       |      | 1.38   | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 6-Feb-15  |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 7-Feb-15  |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 8-Feb-15  |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 9-Feb-15  |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 10-Feb-15 |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 11-Feb-15 |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 12-Feb-15 |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 13-Feb-15 |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 14-Feb-15 |       |      | 0      | 95.92             |               |                | Rp 73,481.43 | Rp 73,481.43         |
| 15-Feb-15 | 10.9  |      | 0      | 95.92             | Rp 131,774.28 |                | Rp 73,481.43 | Rp 205,255.71        |
| 16-Feb-15 |       | 10.9 | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 17-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 18-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 19-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 20-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 21-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 22-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |
| 23-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60 | Rp 81,831.60         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 24-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60  | Rp 81,831.60         |
| 25-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60  | Rp 81,831.60         |
| 26-Feb-15 |       |      | 0      | 106.82            |               |                | Rp 81,831.60  | Rp 81,831.60         |
| 27-Feb-15 |       |      | 3.07   | 103.75            |               |                | Rp 79,479.76  | Rp 79,479.76         |
| 28-Feb-15 | 10.9  |      | 0      | 103.75            | Rp 131,774.28 |                | Rp 79,479.76  | Rp 211,254.04        |
| 1-Mar-15  |       |      | 0      | 103.75            |               |                | Rp 79,479.76  | Rp 79,479.76         |
| 2-Mar-15  |       |      | 0      | 103.75            |               |                | Rp 79,479.76  | Rp 79,479.76         |
| 3-Mar-15  |       | 10.9 | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 4-Mar-15  |       |      | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 5-Mar-15  |       |      | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 6-Mar-15  |       |      | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 7-Mar-15  |       |      | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 8-Mar-15  |       |      | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 9-Mar-15  |       |      | 0      | 114.65            |               |                | Rp 87,829.93  | Rp 87,829.93         |
| 10-Mar-15 |       |      | 0.13   | 114.52            |               |                | Rp 87,730.34  | Rp 87,730.34         |
| 11-Mar-15 |       |      | 0      | 114.52            |               |                | Rp 87,730.34  | Rp 87,730.34         |
| 12-Mar-15 |       |      | 0      | 114.52            |               |                | Rp 87,730.34  | Rp 87,730.34         |
| 13-Mar-15 |       |      | 0      | 114.52            |               |                | Rp 87,730.34  | Rp 87,730.34         |
| 14-Mar-15 |       |      | 0      | 114.52            |               |                | Rp 87,730.34  | Rp 87,730.34         |
| 15-Mar-15 | 10.9  |      | 0      | 114.52            | Rp 131,774.28 |                | Rp 87,730.34  | Rp 219,504.62        |
| 16-Mar-15 |       |      | 0      | 114.52            |               |                | Rp 87,730.34  | Rp 87,730.34         |
| 17-Mar-15 |       | 10.9 | 0      | 125.42            |               |                | Rp 96,080.50  | Rp 96,080.50         |
| 18-Mar-15 |       |      | 0      | 125.42            |               |                | Rp 96,080.50  | Rp 96,080.50         |
| 19-Mar-15 |       |      | 0      | 125.42            |               |                | Rp 96,080.50  | Rp 96,080.50         |
| 20-Mar-15 |       |      | 2.51   | 122.91            |               |                | Rp 94,157.66  | Rp 94,157.66         |
| 21-Mar-15 |       |      | 0      | 122.91            |               |                | Rp 94,157.66  | Rp 94,157.66         |
| 22-Mar-15 |       |      | 0.18   | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 23-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 24-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 25-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 26-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 27-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 28-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 29-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 30-Mar-15 |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 31-Mar-15 | 10.9  |      | 0      | 122.73            | Rp 131,774.28 |                | Rp 94,019.77  | Rp 225,794.05        |
| 1-Apr-15  |       |      | 0      | 122.73            |               |                | Rp 94,019.77  | Rp 94,019.77         |
| 2-Apr-15  |       | 10.9 | 0      | 133.63            |               |                | Rp 102,369.93 | Rp 102,369.93        |
| 3-Apr-15  |       |      | 0      | 133.63            |               |                | Rp 102,369.93 | Rp 102,369.93        |
| 4-Apr-15  |       |      | 0      | 133.63            |               |                | Rp 102,369.93 | Rp 102,369.93        |
| 5-Apr-15  |       |      | 1.51   | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 6-Apr-15  |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 7-Apr-15  |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 8-Apr-15  |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 9-Apr-15  |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 10-Apr-15 |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 11-Apr-15 |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 12-Apr-15 |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 13-Apr-15 |       |      | 0      | 132.12            |               |                | Rp 101,213.17 | Rp 101,213.17        |
| 14-Apr-15 |       |      | 5.86   | 126.26            |               |                | Rp 96,724.00  | Rp 96,724.00         |
| 15-Apr-15 | 10.9  |      | 0      | 126.26            | Rp 131,774.28 |                | Rp 96,724.00  | Rp 228,498.28        |
| 16-Apr-15 |       |      | 0      | 126.26            |               |                | Rp 96,724.00  | Rp 96,724.00         |
| 17-Apr-15 |       |      | 1.37   | 124.89            |               |                | Rp 95,674.48  | Rp 95,674.48         |
| 18-Apr-15 |       | 10.9 | 0      | 135.79            |               |                | Rp 104,024.65 | Rp 104,024.65        |
| 19-Apr-15 |       |      | 0      | 135.79            |               |                | Rp 104,024.65 | Rp 104,024.65        |
| 20-Apr-15 |       |      | 0      | 135.79            |               |                | Rp 104,024.65 | Rp 104,024.65        |
| 21-Apr-15 |       |      | 0      | 135.79            |               |                | Rp 104,024.65 | Rp 104,024.65        |
| 22-Apr-15 |       |      | 0      | 135.79            |               |                | Rp 104,024.65 | Rp 104,024.65        |
| 23-Apr-15 |       |      | 1.14   | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 24-Apr-15 |       |      | 0      | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 25-Apr-15 |       |      | 0      | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 26-Apr-15 |       |      | 0      | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 27-Apr-15 |       |      | 0      | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 28-Apr-15 |       |      | 0      | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 29-Apr-15 |       |      | 0      | 134.65            |               |                | Rp 103,151.33 | Rp 103,151.33        |
| 30-Apr-15 | 10.9  |      | 0      | 134.65            | Rp 131,774.28 |                | Rp 103,151.33 | Rp 234,925.61        |
| 1-May-15  |       |      | 0.58   | 134.07            |               |                | Rp 102,707.00 | Rp 102,707.00        |
| 2-May-15  |       |      | 0      | 134.07            |               |                | Rp 102,707.00 | Rp 102,707.00        |
| 3-May-15  |       | 10.9 | 0      | 144.97            |               |                | Rp 111,057.17 | Rp 111,057.17        |
| 4-May-15  |       |      | 1.96   | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 5-May-15  |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 6-May-15  |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 7-May-15  |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 8-May-15  |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 9-May-15  |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 10-May-15 |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 11-May-15 |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 12-May-15 |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 13-May-15 |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 14-May-15 |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 15-May-15 | 10.9  |      | 0      | 143.01            | Rp 131,774.28 |                | Rp 109,555.67 | Rp 241,329.95        |
| 16-May-15 |       |      | 0      | 143.01            |               |                | Rp 109,555.67 | Rp 109,555.67        |
| 17-May-15 |       | 10.9 | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 18-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 19-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 20-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 21-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 22-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 23-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 24-May-15 |       |      | 0      | 153.91            |               |                | Rp 117,905.83 | Rp 117,905.83        |
| 25-May-15 |       |      | 3.01   | 150.9             |               |                | Rp 115,599.96 | Rp 115,599.96        |
| 26-May-15 |       |      | 0      | 150.9             |               |                | Rp 115,599.96 | Rp 115,599.96        |
| 27-May-15 |       |      | 0      | 150.9             |               |                | Rp 115,599.96 | Rp 115,599.96        |
| 28-May-15 |       |      | 0      | 150.9             |               |                | Rp 115,599.96 | Rp 115,599.96        |
| 29-May-15 |       |      | 0.85   | 150.05            |               |                | Rp 114,948.80 | Rp 114,948.80        |
| 30-May-15 |       |      | 0      | 150.05            |               |                | Rp 114,948.80 | Rp 114,948.80        |
| 31-May-15 | 10.9  |      | 7.4    | 142.65            | Rp 131,774.28 |                | Rp 109,279.89 | Rp 241,054.17        |
| 1-Jun-15  |       |      | 0      | 142.65            |               |                | Rp 109,279.89 | Rp 109,279.89        |
| 2-Jun-15  |       |      | 0      | 142.65            |               |                | Rp 109,279.89 | Rp 109,279.89        |
| 3-Jun-15  |       |      | 0      | 142.65            |               |                | Rp 109,279.89 | Rp 109,279.89        |
| 4-Jun-15  |       |      | 0      | 142.65            |               |                | Rp 109,279.89 | Rp 109,279.89        |
| 5-Jun-15  |       |      | 0      | 142.65            |               |                | Rp 109,279.89 | Rp 109,279.89        |
| 6-Jun-15  |       | 10.9 | 0      | 153.55            |               |                | Rp 117,630.05 | Rp 117,630.05        |
| 7-Jun-15  |       |      | 0      | 153.55            |               |                | Rp 117,630.05 | Rp 117,630.05        |
| 8-Jun-15  |       |      | 0      | 153.55            |               |                | Rp 117,630.05 | Rp 117,630.05        |
| 9-Jun-15  |       |      | 0      | 153.55            |               |                | Rp 117,630.05 | Rp 117,630.05        |
| 10-Jun-15 |       |      | 0      | 153.55            |               |                | Rp 117,630.05 | Rp 117,630.05        |
| 11-Jun-15 |       |      | 2.01   | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 12-Jun-15 |       |      | 0      | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 13-Jun-15 |       |      | 0      | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 14-Jun-15 |       |      | 0      | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 15-Jun-15 | 10.9  |      | 0      | 151.54            | Rp 131,774.28 |                | Rp 116,090.25 | Rp 247,864.53        |
| 16-Jun-15 |       |      | 0      | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 17-Jun-15 |       |      | 0      | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 18-Jun-15 |       |      | 0      | 151.54            |               |                | Rp 116,090.25 | Rp 116,090.25        |
| 19-Jun-15 |       | 10.9 | 0      | 162.44            |               |                | Rp 124,440.41 | Rp 124,440.41        |
| 20-Jun-15 |       |      | 0.87   | 161.57            |               |                | Rp 123,773.93 | Rp 123,773.93        |
| 21-Jun-15 |       |      | 0      | 161.57            |               |                | Rp 123,773.93 | Rp 123,773.93        |
| 22-Jun-15 |       |      | 0.63   | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 23-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 24-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 25-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 26-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 27-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 28-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 29-Jun-15 |       |      | 0      | 160.94            |               |                | Rp 123,291.31 | Rp 123,291.31        |
| 30-Jun-15 | 10.9  |      | 0      | 160.94            | Rp 131,774.28 |                | Rp 123,291.31 | Rp 255,065.59        |
| 1-Jul-15  |       | 10.9 | 0.93   | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 2-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 3-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 4-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 5-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 6-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 7-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 8-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 9-Jul-15  |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 10-Jul-15 |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 11-Jul-15 |       |      | 0      | 170.91            |               |                | Rp 130,929.02 | Rp 130,929.02        |
| 12-Jul-15 |       |      | 1.27   | 169.64            |               |                | Rp 129,956.11 | Rp 129,956.11        |
| 13-Jul-15 |       |      | 0      | 169.64            |               |                | Rp 129,956.11 | Rp 129,956.11        |
| 14-Jul-15 |       |      | 0      | 169.64            |               |                | Rp 129,956.11 | Rp 129,956.11        |
| 15-Jul-15 | 10.9  |      | 0      | 169.64            | Rp 131,774.28 |                | Rp 129,956.11 | Rp 261,730.39        |
| 16-Jul-15 |       |      | 0      | 169.64            |               |                | Rp 129,956.11 | Rp 129,956.11        |
| 17-Jul-15 |       |      | 0      | 169.64            |               |                | Rp 129,956.11 | Rp 129,956.11        |
| 18-Jul-15 |       | 10.9 | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 19-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 20-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 21-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 22-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 23-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 24-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 25-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 26-Jul-15 |       |      | 0      | 180.54            |               |                | Rp 138,306.28 | Rp 138,306.28        |
| 27-Jul-15 |       |      | 0.28   | 180.26            |               |                | Rp 138,091.78 | Rp 138,091.78        |
| 28-Jul-15 |       |      | 0      | 180.26            |               |                | Rp 138,091.78 | Rp 138,091.78        |
| 29-Jul-15 |       |      | 0      | 180.26            |               |                | Rp 138,091.78 | Rp 138,091.78        |
| 30-Jul-15 |       |      | 0      | 180.26            |               |                | Rp 138,091.78 | Rp 138,091.78        |
| 31-Jul-15 | 10.9  |      | 0      | 180.26            | Rp 131,774.28 |                | Rp 138,091.78 | Rp 269,866.06        |
| 1-Aug-15  |       |      | 0      | 180.26            |               |                | Rp 138,091.78 | Rp 138,091.78        |
| 2-Aug-15  |       |      | 2.37   | 177.89            |               |                | Rp 136,276.19 | Rp 136,276.19        |
| 3-Aug-15  |       | 10.9 | 0      | 188.79            |               |                | Rp 144,626.36 | Rp 144,626.36        |
| 4-Aug-15  |       |      | 0.93   | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 5-Aug-15  |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 6-Aug-15  |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 7-Aug-15  |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 8-Aug-15  |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 9-Aug-15  |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 10-Aug-15 |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 11-Aug-15 |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 12-Aug-15 |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 13-Aug-15 |       |      | 0      | 187.86            |               |                | Rp 143,913.91 | Rp 143,913.91        |
| 14-Aug-15 |       |      | 3.06   | 184.8             |               |                | Rp 141,569.74 | Rp 141,569.74        |
| 15-Aug-15 | 10.9  |      | 0      | 184.8             | Rp 131,774.28 |                | Rp 141,569.74 | Rp 273,344.02        |
| 16-Aug-15 |       |      | 0      | 184.8             |               |                | Rp 141,569.74 | Rp 141,569.74        |
| 17-Aug-15 |       | 10.9 | 0      | 195.7             |               |                | Rp 149,919.90 | Rp 149,919.90        |
| 18-Aug-15 |       |      | 2.81   | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 19-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 20-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 21-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 22-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 23-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 24-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 25-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 26-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 27-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 28-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 29-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 30-Aug-15 |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 31-Aug-15 | 10.9  |      | 0      | 192.89            | Rp 131,774.28 |                | Rp 147,767.24 | Rp 279,541.52        |
| 1-Sep-15  |       |      | 0      | 192.89            |               |                | Rp 147,767.24 | Rp 147,767.24        |
| 2-Sep-15  |       | 10.9 | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 3-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 4-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 5-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 6-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 7-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 8-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 9-Sep-15  |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 10-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 11-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 12-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 13-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 14-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 15-Sep-15 | 10.9  |      | 0      | 203.79            | Rp 131,774.28 |                | Rp 156,117.41 | Rp 287,891.69        |
| 16-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 17-Sep-15 |       |      | 0      | 203.79            |               |                | Rp 156,117.41 | Rp 156,117.41        |
| 18-Sep-15 |       | 10.9 | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 19-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 20-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 21-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 22-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 23-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 24-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 25-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 26-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 27-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 28-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 29-Sep-15 |       |      | 0      | 214.69            |               |                | Rp 164,467.57 | Rp 164,467.57        |
| 30-Sep-15 | 10.9  |      | 0      | 214.69            | Rp 131,774.28 |                | Rp 164,467.57 | Rp 296,241.85        |
| 1-Oct-15  |       |      | 2.34   | 212.35            |               |                | Rp 162,674.96 | Rp 162,674.96        |
| 2-Oct-15  |       | 10.9 | 0      | 223.25            |               |                | Rp 171,025.13 | Rp 171,025.13        |
| 3-Oct-15  |       |      | 0      | 223.25            |               |                | Rp 171,025.13 | Rp 171,025.13        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 4-Oct-15  |       |      | 0      | 223.25            |               |                | Rp 171,025.13 | Rp 171,025.13        |
| 5-Oct-15  |       |      | 17.94  | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 6-Oct-15  |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 7-Oct-15  |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 8-Oct-15  |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 9-Oct-15  |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 10-Oct-15 |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 11-Oct-15 |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 12-Oct-15 |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 13-Oct-15 |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 14-Oct-15 |       |      | 0      | 205.31            |               |                | Rp 157,281.83 | Rp 157,281.83        |
| 15-Oct-15 | 10.9  |      | 0      | 205.31            | Rp 131,774.28 |                | Rp 157,281.83 | Rp 289,056.11        |
| 16-Oct-15 |       | 10.9 | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 17-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 18-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 19-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 20-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 21-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 22-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 23-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 24-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 25-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 26-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 27-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 28-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 29-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 30-Oct-15 |       |      | 0      | 216.21            |               |                | Rp 165,631.99 | Rp 165,631.99        |
| 31-Oct-15 | 10.9  |      | 0.64   | 215.57            | Rp 131,774.28 |                | Rp 165,141.71 | Rp 296,915.99        |
| 1-Nov-15  |       |      | 0      | 215.57            |               |                | Rp 165,141.71 | Rp 165,141.71        |
| 2-Nov-15  |       | 10.9 | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 3-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 4-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 5-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 6-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 7-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 8-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 9-Nov-15  |       |      | 0      | 226.47            |               |                | Rp 173,491.87 | Rp 173,491.87        |
| 10-Nov-15 |       |      | 5.35   | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 11-Nov-15 |       |      | 0      | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 12-Nov-15 |       |      | 0      | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 13-Nov-15 |       |      | 0      | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 14-Nov-15 |       |      | 0      | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 15-Nov-15 | 10.9  |      | 0      | 221.12            | Rp 131,774.28 |                | Rp 169,393.40 | Rp 301,167.68        |
| 16-Nov-15 |       |      | 0      | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 17-Nov-15 |       |      | 0      | 221.12            |               |                | Rp 169,393.40 | Rp 169,393.40        |
| 18-Nov-15 |       |      | 0.29   | 220.83            |               |                | Rp 169,171.24 | Rp 169,171.24        |
| 19-Nov-15 |       | 10.9 | 3.8    | 227.93            |               |                | Rp 174,610.34 | Rp 174,610.34        |
| 20-Nov-15 |       |      | 0      | 227.93            |               |                | Rp 174,610.34 | Rp 174,610.34        |
| 21-Nov-15 |       |      | 3.99   | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 22-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 23-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 24-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 25-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 26-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 27-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 28-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 29-Nov-15 |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 30-Nov-15 | 10.9  |      | 0      | 223.94            | Rp 131,774.28 |                | Rp 171,553.72 | Rp 303,328.00        |
| 1-Dec-15  |       |      | 0      | 223.94            |               |                | Rp 171,553.72 | Rp 171,553.72        |
| 2-Dec-15  |       | 10.9 | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 3-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 4-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 5-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 6-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 7-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 8-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 9-Dec-15  |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 10-Dec-15 |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 11-Dec-15 |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 12-Dec-15 |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 13-Dec-15 |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 14-Dec-15 |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |
| 15-Dec-15 | 10.9  |      | 0      | 234.84            | Rp 131,774.28 |                | Rp 179,903.88 | Rp 311,678.16        |
| 16-Dec-15 |       |      | 0      | 234.84            |               |                | Rp 179,903.88 | Rp 179,903.88        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|------------|----------------|---------------|----------------------|
| 17-Dec-15 |       |      | 0      | 234.84            |            |                | Rp 179,903.88 | Rp 179,903.88        |
| 18-Dec-15 |       |      | 0      | 234.84            |            |                | Rp 179,903.88 | Rp 179,903.88        |
| 19-Dec-15 |       |      | 0      | 234.84            |            |                | Rp 179,903.88 | Rp 179,903.88        |
| 20-Dec-15 |       |      | 0      | 234.84            |            |                | Rp 179,903.88 | Rp 179,903.88        |
| 21-Dec-15 |       | 10.9 | 1.47   | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 22-Dec-15 |       |      | 0      | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 23-Dec-15 |       |      | 0      | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 24-Dec-15 |       |      | 0      | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 25-Dec-15 |       |      | 0      | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 26-Dec-15 |       |      | 0      | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 27-Dec-15 |       |      | 0      | 244.27            |            |                | Rp 187,127.92 | Rp 187,127.92        |
| 28-Dec-15 |       |      | 1.47   | 242.8             |            |                | Rp 186,001.80 | Rp 186,001.80        |
| 29-Dec-15 |       |      | 0      | 242.8             |            |                | Rp 186,001.80 | Rp 186,001.80        |
| 30-Dec-15 |       |      | 0      | 242.8             |            |                | Rp 186,001.80 | Rp 186,001.80        |
| 31-Dec-15 |       |      | 0      | 242.8             |            |                | Rp 186,001.80 | Rp 186,001.80        |
|           |       |      |        |                   |            |                |               | Rp 49,479,946.07     |

### Replication 3

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 3.01   | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 3-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 4-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 5-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 6-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 7-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 8-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 9-Jan-15  |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 10-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 11-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 12-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 13-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 14-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 15-Jan-15 | 10.9  |      | 0      | 81.74             | Rp 131,774.28 |                | Rp 62,618.56 | Rp 194,392.84        |
| 16-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 17-Jan-15 |       |      | 0      | 81.74             |               |                | Rp 62,618.56 | Rp 62,618.56         |
| 18-Jan-15 |       | 10.9 | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 19-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 20-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 21-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 22-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 23-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 24-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 25-Jan-15 |       |      | 0      | 92.64             |               |                | Rp 70,968.72 | Rp 70,968.72         |
| 26-Jan-15 |       |      | 1.39   | 91.25             |               |                | Rp 69,903.89 | Rp 69,903.89         |
| 27-Jan-15 |       |      | 0      | 91.25             |               |                | Rp 69,903.89 | Rp 69,903.89         |
| 28-Jan-15 |       |      | 0      | 91.25             |               |                | Rp 69,903.89 | Rp 69,903.89         |
| 29-Jan-15 |       |      | 0      | 91.25             |               |                | Rp 69,903.89 | Rp 69,903.89         |
| 30-Jan-15 |       |      | 0      | 91.25             |               |                | Rp 69,903.89 | Rp 69,903.89         |
| 31-Jan-15 | 10.9  |      | 2.48   | 88.77             | Rp 131,774.28 |                | Rp 68,004.03 | Rp 199,778.31        |
| 1-Feb-15  |       | 10.9 | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 2-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 3-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 4-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 5-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 6-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 7-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 8-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 9-Feb-15  |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 10-Feb-15 |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 11-Feb-15 |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 12-Feb-15 |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 13-Feb-15 |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 14-Feb-15 |       |      | 0      | 99.67             |               |                | Rp 76,354.20 | Rp 76,354.20         |
| 15-Feb-15 | 10.9  |      | 0.43   | 99.24             | Rp 131,774.28 |                | Rp 76,024.79 | Rp 207,799.07        |
| 16-Feb-15 |       |      | 0      | 99.24             |               |                | Rp 76,024.79 | Rp 76,024.79         |
| 17-Feb-15 |       |      | 0      | 99.24             |               |                | Rp 76,024.79 | Rp 76,024.79         |
| 18-Feb-15 |       | 10.9 | 3.56   | 106.58            |               |                | Rp 81,647.74 | Rp 81,647.74         |
| 19-Feb-15 |       |      | 0      | 106.58            |               |                | Rp 81,647.74 | Rp 81,647.74         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 20-Feb-15 |       |      | 0      | 106.58            |               |                | Rp 81,647.74 | Rp 81,647.74         |
| 21-Feb-15 |       |      | 0      | 106.58            |               |                | Rp 81,647.74 | Rp 81,647.74         |
| 22-Feb-15 |       |      | 1.57   | 105.01            |               |                | Rp 80,445.01 | Rp 80,445.01         |
| 23-Feb-15 |       |      | 0      | 105.01            |               |                | Rp 80,445.01 | Rp 80,445.01         |
| 24-Feb-15 |       |      | 0      | 105.01            |               |                | Rp 80,445.01 | Rp 80,445.01         |
| 25-Feb-15 |       |      | 0.63   | 104.38            |               |                | Rp 79,962.39 | Rp 79,962.39         |
| 26-Feb-15 |       |      | 3.42   | 100.96            |               |                | Rp 77,342.43 | Rp 77,342.43         |
| 27-Feb-15 |       |      | 0      | 100.96            |               |                | Rp 77,342.43 | Rp 77,342.43         |
| 28-Feb-15 | 10.9  |      | 0      | 100.96            | Rp 131,774.28 |                | Rp 77,342.43 | Rp 209,116.71        |
| 1-Mar-15  |       |      | 0      | 100.96            |               |                | Rp 77,342.43 | Rp 77,342.43         |
| 2-Mar-15  |       | 10.9 | 0.82   | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 3-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 4-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 5-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 6-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 7-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 8-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 9-Mar-15  |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 10-Mar-15 |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 11-Mar-15 |       |      | 0      | 111.04            |               |                | Rp 85,064.41 | Rp 85,064.41         |
| 12-Mar-15 |       |      | 8.5    | 102.54            |               |                | Rp 78,552.82 | Rp 78,552.82         |
| 13-Mar-15 |       |      | 0      | 102.54            |               |                | Rp 78,552.82 | Rp 78,552.82         |
| 14-Mar-15 |       |      | 0.35   | 102.19            |               |                | Rp 78,284.69 | Rp 78,284.69         |
| 15-Mar-15 | 10.9  |      | 0      | 102.19            | Rp 131,774.28 |                | Rp 78,284.69 | Rp 210,058.97        |
| 16-Mar-15 |       |      | 0      | 102.19            |               |                | Rp 78,284.69 | Rp 78,284.69         |
| 17-Mar-15 |       |      | 0      | 102.19            |               |                | Rp 78,284.69 | Rp 78,284.69         |
| 18-Mar-15 |       | 10.9 | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 19-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 20-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 21-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 22-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 23-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 24-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 25-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 26-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 27-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 28-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 29-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 30-Mar-15 |       |      | 0      | 113.09            |               |                | Rp 86,634.86 | Rp 86,634.86         |
| 31-Mar-15 | 10.9  |      | 0      | 113.09            | Rp 131,774.28 |                | Rp 86,634.86 | Rp 218,409.14        |
| 1-Apr-15  |       | 10.9 | 0      | 123.99            |               |                | Rp 94,985.02 | Rp 94,985.02         |
| 2-Apr-15  |       |      | 0.26   | 123.73            |               |                | Rp 94,785.84 | Rp 94,785.84         |
| 3-Apr-15  |       |      | 0      | 123.73            |               |                | Rp 94,785.84 | Rp 94,785.84         |
| 4-Apr-15  |       |      | 8.74   | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 5-Apr-15  |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 6-Apr-15  |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 7-Apr-15  |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 8-Apr-15  |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 9-Apr-15  |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 10-Apr-15 |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 11-Apr-15 |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 12-Apr-15 |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 13-Apr-15 |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 14-Apr-15 |       |      | 0      | 114.99            |               |                | Rp 88,090.39 | Rp 88,090.39         |
| 15-Apr-15 | 10.9  |      | 3.49   | 111.5             | Rp 131,774.28 |                | Rp 85,416.81 | Rp 217,191.09        |
| 16-Apr-15 |       |      | 0      | 111.5             |               |                | Rp 85,416.81 | Rp 85,416.81         |
| 17-Apr-15 |       |      | 17.7   | 93.8              |               |                | Rp 71,857.37 | Rp 71,857.37         |
| 18-Apr-15 |       |      | 0.55   | 93.25             |               |                | Rp 71,436.03 | Rp 71,436.03         |
| 19-Apr-15 |       |      | 0      | 93.25             |               |                | Rp 71,436.03 | Rp 71,436.03         |
| 20-Apr-15 |       |      | 0      | 93.25             |               |                | Rp 71,436.03 | Rp 71,436.03         |
| 21-Apr-15 |       |      | 0      | 93.25             |               |                | Rp 71,436.03 | Rp 71,436.03         |
| 22-Apr-15 |       |      | 0      | 93.25             |               |                | Rp 71,436.03 | Rp 71,436.03         |
| 23-Apr-15 |       | 10.9 | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 24-Apr-15 |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 25-Apr-15 |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 26-Apr-15 |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 27-Apr-15 |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 28-Apr-15 |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 29-Apr-15 |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 30-Apr-15 | 10.9  |      | 0      | 104.15            | Rp 131,774.28 |                | Rp 79,786.19 | Rp 211,560.47        |
| 1-May-15  |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 2-May-15  |       |      | 0      | 104.15            |               |                | Rp 79,786.19 | Rp 79,786.19         |
| 3-May-15  |       | 10.9 | 0      | 115.05            |               |                | Rp 88,136.35 | Rp 88,136.35         |
| 4-May-15  |       |      | 0      | 115.05            |               |                | Rp 88,136.35 | Rp 88,136.35         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 5-May-15  |       |      | 1.56   | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 6-May-15  |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 7-May-15  |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 8-May-15  |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 9-May-15  |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 10-May-15 |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 11-May-15 |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 12-May-15 |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 13-May-15 |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 14-May-15 |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 15-May-15 | 10.9  |      | 0      | 113.49            | Rp 131,774.28 |                | Rp 86,941.28  | Rp 218,715.56        |
| 16-May-15 |       |      | 0      | 113.49            |               |                | Rp 86,941.28  | Rp 86,941.28         |
| 17-May-15 |       | 10.9 | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 18-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 19-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 20-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 21-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 22-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 23-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 24-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 25-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 26-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 27-May-15 |       |      | 0      | 124.39            |               |                | Rp 95,291.45  | Rp 95,291.45         |
| 28-May-15 |       |      | 1.77   | 122.62            |               |                | Rp 93,935.50  | Rp 93,935.50         |
| 29-May-15 |       |      | 0      | 122.62            |               |                | Rp 93,935.50  | Rp 93,935.50         |
| 30-May-15 |       |      | 0      | 122.62            |               |                | Rp 93,935.50  | Rp 93,935.50         |
| 31-May-15 | 10.9  |      | 0      | 122.62            | Rp 131,774.28 |                | Rp 93,935.50  | Rp 225,709.78        |
| 1-Jun-15  |       |      | 0      | 122.62            |               |                | Rp 93,935.50  | Rp 93,935.50         |
| 2-Jun-15  |       |      | 0      | 122.62            |               |                | Rp 93,935.50  | Rp 93,935.50         |
| 3-Jun-15  |       | 10.9 | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 4-Jun-15  |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 5-Jun-15  |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 6-Jun-15  |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 7-Jun-15  |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 8-Jun-15  |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 9-Jun-15  |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 10-Jun-15 |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 11-Jun-15 |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 12-Jun-15 |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 13-Jun-15 |       |      | 0      | 133.52            |               |                | Rp 102,285.67 | Rp 102,285.67        |
| 14-Jun-15 |       |      | 1.42   | 132.1             |               |                | Rp 101,197.85 | Rp 101,197.85        |
| 15-Jun-15 | 10.9  |      | 0      | 132.1             | Rp 131,774.28 |                | Rp 101,197.85 | Rp 232,972.13        |
| 16-Jun-15 |       | 10.9 | 0      | 143               |               |                | Rp 109,548.01 | Rp 109,548.01        |
| 17-Jun-15 |       |      | 0      | 143               |               |                | Rp 109,548.01 | Rp 109,548.01        |
| 18-Jun-15 |       |      | 0      | 143               |               |                | Rp 109,548.01 | Rp 109,548.01        |
| 19-Jun-15 |       |      | 0      | 143               |               |                | Rp 109,548.01 | Rp 109,548.01        |
| 20-Jun-15 |       |      | 0      | 143               |               |                | Rp 109,548.01 | Rp 109,548.01        |
| 21-Jun-15 |       |      | 3.54   | 139.46            |               |                | Rp 106,836.12 | Rp 106,836.12        |
| 22-Jun-15 |       |      | 0.46   | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 23-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 24-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 25-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 26-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 27-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 28-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 29-Jun-15 |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 30-Jun-15 | 10.9  |      | 0      | 139               | Rp 131,774.28 |                | Rp 106,483.73 | Rp 238,258.01        |
| 1-Jul-15  |       |      | 0      | 139               |               |                | Rp 106,483.73 | Rp 106,483.73        |
| 2-Jul-15  |       | 10.9 | 0      | 149.9             |               |                | Rp 114,833.89 | Rp 114,833.89        |
| 3-Jul-15  |       |      | 0      | 149.9             |               |                | Rp 114,833.89 | Rp 114,833.89        |
| 4-Jul-15  |       |      | 0      | 149.9             |               |                | Rp 114,833.89 | Rp 114,833.89        |
| 5-Jul-15  |       |      | 0      | 149.9             |               |                | Rp 114,833.89 | Rp 114,833.89        |
| 6-Jul-15  |       |      | 1.1    | 148.8             |               |                | Rp 113,991.22 | Rp 113,991.22        |
| 7-Jul-15  |       |      | 0      | 148.8             |               |                | Rp 113,991.22 | Rp 113,991.22        |
| 8-Jul-15  |       |      | 0      | 148.8             |               |                | Rp 113,991.22 | Rp 113,991.22        |
| 9-Jul-15  |       |      | 0      | 148.8             |               |                | Rp 113,991.22 | Rp 113,991.22        |
| 10-Jul-15 |       |      | 2.79   | 146.01            |               |                | Rp 111,853.88 | Rp 111,853.88        |
| 11-Jul-15 |       |      | 0      | 146.01            |               |                | Rp 111,853.88 | Rp 111,853.88        |
| 12-Jul-15 |       |      | 0      | 146.01            |               |                | Rp 111,853.88 | Rp 111,853.88        |
| 13-Jul-15 |       |      | 0      | 146.01            |               |                | Rp 111,853.88 | Rp 111,853.88        |
| 14-Jul-15 |       |      | 2.08   | 143.93            |               |                | Rp 110,260.46 | Rp 110,260.46        |
| 15-Jul-15 | 10.9  |      | 0      | 143.93            | Rp 131,774.28 |                | Rp 110,260.46 | Rp 242,034.74        |
| 16-Jul-15 |       |      | 0      | 143.93            |               |                | Rp 110,260.46 | Rp 110,260.46        |
| 17-Jul-15 |       |      | 0      | 143.93            |               |                | Rp 110,260.46 | Rp 110,260.46        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 18-Jul-15 |       |      | 1.64   | 142.29            |               |                | Rp 109,004.10 | Rp 109,004.10        |
| 19-Jul-15 |       | 10.9 | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 20-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 21-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 22-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 23-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 24-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 25-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 26-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 27-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 28-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 29-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 30-Jul-15 |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 31-Jul-15 | 10.9  |      | 0      | 153.19            | Rp 131,774.28 |                | Rp 117,354.26 | Rp 249,128.54        |
| 1-Aug-15  |       |      | 0      | 153.19            |               |                | Rp 117,354.26 | Rp 117,354.26        |
| 2-Aug-15  |       | 10.9 | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 3-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 4-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 5-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 6-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 7-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 8-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 9-Aug-15  |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 10-Aug-15 |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 11-Aug-15 |       |      | 0      | 164.09            |               |                | Rp 125,704.43 | Rp 125,704.43        |
| 12-Aug-15 |       |      | 3.96   | 160.13            |               |                | Rp 122,670.79 | Rp 122,670.79        |
| 13-Aug-15 |       |      | 0      | 160.13            |               |                | Rp 122,670.79 | Rp 122,670.79        |
| 14-Aug-15 |       |      | 0      | 160.13            |               |                | Rp 122,670.79 | Rp 122,670.79        |
| 15-Aug-15 | 10.9  |      | 0      | 160.13            | Rp 131,774.28 |                | Rp 122,670.79 | Rp 254,445.07        |
| 16-Aug-15 |       |      | 0      | 160.13            |               |                | Rp 122,670.79 | Rp 122,670.79        |
| 17-Aug-15 |       | 10.9 | 9.93   | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 18-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 19-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 20-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 21-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 22-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 23-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 24-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 25-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 26-Aug-15 |       |      | 0      | 161.1             |               |                | Rp 123,413.88 | Rp 123,413.88        |
| 27-Aug-15 |       |      | 1.12   | 159.98            |               |                | Rp 122,555.88 | Rp 122,555.88        |
| 28-Aug-15 |       |      | 0      | 159.98            |               |                | Rp 122,555.88 | Rp 122,555.88        |
| 29-Aug-15 |       |      | 0      | 159.98            |               |                | Rp 122,555.88 | Rp 122,555.88        |
| 30-Aug-15 |       |      | 0      | 159.98            |               |                | Rp 122,555.88 | Rp 122,555.88        |
| 31-Aug-15 | 10.9  |      | 0      | 159.98            | Rp 131,774.28 |                | Rp 122,555.88 | Rp 254,330.16        |
| 1-Sep-15  |       |      | 3.02   | 156.96            |               |                | Rp 120,242.35 | Rp 120,242.35        |
| 2-Sep-15  |       | 10.9 | 0.72   | 167.14            |               |                | Rp 128,040.94 | Rp 128,040.94        |
| 3-Sep-15  |       |      | 3.57   | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 4-Sep-15  |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 5-Sep-15  |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 6-Sep-15  |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 7-Sep-15  |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 8-Sep-15  |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 9-Sep-15  |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 10-Sep-15 |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 11-Sep-15 |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 12-Sep-15 |       |      | 0      | 163.57            |               |                | Rp 125,306.07 | Rp 125,306.07        |
| 13-Sep-15 |       |      | 0.51   | 163.06            |               |                | Rp 124,915.37 | Rp 124,915.37        |
| 14-Sep-15 |       |      | 0      | 163.06            |               |                | Rp 124,915.37 | Rp 124,915.37        |
| 15-Sep-15 | 10.9  |      | 0      | 163.06            | Rp 131,774.28 |                | Rp 124,915.37 | Rp 256,689.65        |
| 16-Sep-15 |       |      | 0      | 163.06            |               |                | Rp 124,915.37 | Rp 124,915.37        |
| 17-Sep-15 |       |      | 0      | 163.06            |               |                | Rp 124,915.37 | Rp 124,915.37        |
| 18-Sep-15 |       | 10.9 | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 19-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 20-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 21-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 22-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 23-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 24-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 25-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 26-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 27-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 28-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |
| 29-Sep-15 |       |      | 0      | 173.96            |               |                | Rp 133,265.54 | Rp 133,265.54        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 30-Sep-15 | 10.9  |      | 0      | 173.96            | Rp 131,774.28 |                | Rp 133,265.54 | Rp 265,039.82        |
| 1-Oct-15  |       | 10.9 | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 2-Oct-15  |       |      | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 3-Oct-15  |       |      | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 4-Oct-15  |       |      | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 5-Oct-15  |       |      | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 6-Oct-15  |       |      | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 7-Oct-15  |       |      | 0      | 184.86            |               |                | Rp 141,615.70 | Rp 141,615.70        |
| 8-Oct-15  |       |      | 1.43   | 183.43            |               |                | Rp 140,520.22 | Rp 140,520.22        |
| 9-Oct-15  |       |      | 0      | 183.43            |               |                | Rp 140,520.22 | Rp 140,520.22        |
| 10-Oct-15 |       |      | 0      | 183.43            |               |                | Rp 140,520.22 | Rp 140,520.22        |
| 11-Oct-15 |       |      | 0      | 183.43            |               |                | Rp 140,520.22 | Rp 140,520.22        |
| 12-Oct-15 |       |      | 1.38   | 182.05            |               |                | Rp 139,463.04 | Rp 139,463.04        |
| 13-Oct-15 |       |      | 0      | 182.05            |               |                | Rp 139,463.04 | Rp 139,463.04        |
| 14-Oct-15 |       |      | 0      | 182.05            |               |                | Rp 139,463.04 | Rp 139,463.04        |
| 15-Oct-15 | 10.9  |      | 0      | 182.05            | Rp 131,774.28 |                | Rp 139,463.04 | Rp 271,237.32        |
| 16-Oct-15 |       |      | 0      | 182.05            |               |                | Rp 139,463.04 | Rp 139,463.04        |
| 17-Oct-15 |       |      | 0      | 182.05            |               |                | Rp 139,463.04 | Rp 139,463.04        |
| 18-Oct-15 |       |      | 0.64   | 181.41            |               |                | Rp 138,972.76 | Rp 138,972.76        |
| 19-Oct-15 |       | 10.9 | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 20-Oct-15 |       |      | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 21-Oct-15 |       |      | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 22-Oct-15 |       |      | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 23-Oct-15 |       |      | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 24-Oct-15 |       |      | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 25-Oct-15 |       |      | 0      | 192.31            |               |                | Rp 147,322.92 | Rp 147,322.92        |
| 26-Oct-15 |       |      | 1.63   | 190.68            |               |                | Rp 146,074.23 | Rp 146,074.23        |
| 27-Oct-15 |       |      | 0      | 190.68            |               |                | Rp 146,074.23 | Rp 146,074.23        |
| 28-Oct-15 |       |      | 0      | 190.68            |               |                | Rp 146,074.23 | Rp 146,074.23        |
| 29-Oct-15 |       |      | 0      | 190.68            |               |                | Rp 146,074.23 | Rp 146,074.23        |
| 30-Oct-15 |       |      | 0      | 190.68            |               |                | Rp 146,074.23 | Rp 146,074.23        |
| 31-Oct-15 | 10.9  |      | 0      | 190.68            | Rp 131,774.28 |                | Rp 146,074.23 | Rp 277,848.51        |
| 1-Nov-15  |       |      | 9.42   | 181.26            |               |                | Rp 138,857.85 | Rp 138,857.85        |
| 2-Nov-15  |       |      | 5.07   | 176.19            |               |                | Rp 134,973.87 | Rp 134,973.87        |
| 3-Nov-15  |       | 10.9 | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 4-Nov-15  |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 5-Nov-15  |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 6-Nov-15  |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 7-Nov-15  |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 8-Nov-15  |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 9-Nov-15  |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 10-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 11-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 12-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 13-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 14-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 15-Nov-15 | 10.9  |      | 0      | 187.09            | Rp 131,774.28 |                | Rp 143,324.04 | Rp 275,098.32        |
| 16-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 17-Nov-15 |       |      | 0      | 187.09            |               |                | Rp 143,324.04 | Rp 143,324.04        |
| 18-Nov-15 |       |      | 1.74   | 185.35            |               |                | Rp 141,991.07 | Rp 141,991.07        |
| 19-Nov-15 |       | 10.9 | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 20-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 21-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 22-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 23-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 24-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 25-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 26-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 27-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 28-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 29-Nov-15 |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 30-Nov-15 | 10.9  |      | 0      | 196.25            | Rp 131,774.28 |                | Rp 150,341.24 | Rp 282,115.52        |
| 1-Dec-15  |       |      | 0      | 196.25            |               |                | Rp 150,341.24 | Rp 150,341.24        |
| 2-Dec-15  |       | 10.9 | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 3-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 4-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 5-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 6-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 7-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 8-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 9-Dec-15  |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 10-Dec-15 |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 11-Dec-15 |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |
| 12-Dec-15 |       |      | 0      | 207.15            |               |                | Rp 158,691.40 | Rp 158,691.40        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 13-Dec-15 |       |      | 3.67   | 203.48            |               |                | Rp 155,879.92 | Rp 155,879.92        |
| 14-Dec-15 |       |      | 0      | 203.48            |               |                | Rp 155,879.92 | Rp 155,879.92        |
| 15-Dec-15 | 10.9  |      | 0      | 203.48            | Rp 131,774.28 |                | Rp 155,879.92 | Rp 287,654.20        |
| 16-Dec-15 |       |      | 0      | 203.48            |               |                | Rp 155,879.92 | Rp 155,879.92        |
| 17-Dec-15 |       | 10.9 | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 18-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 19-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 20-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 21-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 22-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 23-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 24-Dec-15 |       |      | 0      | 214.38            |               |                | Rp 164,230.09 | Rp 164,230.09        |
| 25-Dec-15 |       |      | 1.56   | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
| 26-Dec-15 |       |      | 0      | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
| 27-Dec-15 |       |      | 0      | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
| 28-Dec-15 |       |      | 0      | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
| 29-Dec-15 |       |      | 0      | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
| 30-Dec-15 |       |      | 0      | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
| 31-Dec-15 |       |      | 0      | 212.82            |               |                | Rp 163,035.02 | Rp 163,035.02        |
|           |       |      |        |                   |               |                |               | Rp 43,378,106.59     |

## Replication 4

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |      | 1.23   | 83.52             |               |                | Rp 63,982.17 | Rp 63,982.17         |
| 8-Jan-15  |       |      | 0      | 83.52             |               |                | Rp 63,982.17 | Rp 63,982.17         |
| 9-Jan-15  |       |      | 4.9    | 78.62             |               |                | Rp 60,228.42 | Rp 60,228.42         |
| 10-Jan-15 |       |      | 0      | 78.62             |               |                | Rp 60,228.42 | Rp 60,228.42         |
| 11-Jan-15 |       |      | 1.09   | 77.53             |               |                | Rp 59,393.41 | Rp 59,393.41         |
| 12-Jan-15 |       |      | 0      | 77.53             |               |                | Rp 59,393.41 | Rp 59,393.41         |
| 13-Jan-15 |       |      | 0      | 77.53             |               |                | Rp 59,393.41 | Rp 59,393.41         |
| 14-Jan-15 |       |      | 1.91   | 75.62             |               |                | Rp 57,930.21 | Rp 57,930.21         |
| 15-Jan-15 | 10.9  |      | 0      | 75.62             | Rp 131,774.28 |                | Rp 57,930.21 | Rp 189,704.49        |
| 16-Jan-15 |       | 10.9 | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 17-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 18-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 19-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 20-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 21-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 22-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 23-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 24-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 25-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 26-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 27-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 28-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 29-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 30-Jan-15 |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 31-Jan-15 | 10.9  |      | 0      | 86.52             | Rp 131,774.28 |                | Rp 66,280.38 | Rp 198,054.66        |
| 1-Feb-15  |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 2-Feb-15  |       |      | 0      | 86.52             |               |                | Rp 66,280.38 | Rp 66,280.38         |
| 3-Feb-15  |       | 10.9 | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 4-Feb-15  |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 5-Feb-15  |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 6-Feb-15  |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 7-Feb-15  |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 8-Feb-15  |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 9-Feb-15  |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 10-Feb-15 |       |      | 0      | 97.42             |               |                | Rp 74,630.54 | Rp 74,630.54         |
| 11-Feb-15 |       |      | 3.94   | 93.48             |               |                | Rp 71,612.22 | Rp 71,612.22         |
| 12-Feb-15 |       |      | 0      | 93.48             |               |                | Rp 71,612.22 | Rp 71,612.22         |
| 13-Feb-15 |       |      | 0      | 93.48             |               |                | Rp 71,612.22 | Rp 71,612.22         |
| 14-Feb-15 |       |      | 0      | 93.48             |               |                | Rp 71,612.22 | Rp 71,612.22         |
| 15-Feb-15 | 10.9  |      | 0      | 93.48             | Rp 131,774.28 |                | Rp 71,612.22 | Rp 203,386.50        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 16-Feb-15 |       |      | 9.74   | 83.74             |               |                | Rp 64,150.70  | Rp 64,150.70         |
| 17-Feb-15 |       |      | 0      | 83.74             |               |                | Rp 64,150.70  | Rp 64,150.70         |
| 18-Feb-15 |       | 10.9 | 1.86   | 92.78             |               |                | Rp 71,075.97  | Rp 71,075.97         |
| 19-Feb-15 |       |      | 0      | 92.78             |               |                | Rp 71,075.97  | Rp 71,075.97         |
| 20-Feb-15 |       |      | 0      | 92.78             |               |                | Rp 71,075.97  | Rp 71,075.97         |
| 21-Feb-15 |       |      | 1.92   | 90.86             |               |                | Rp 69,605.12  | Rp 69,605.12         |
| 22-Feb-15 |       |      | 0      | 90.86             |               |                | Rp 69,605.12  | Rp 69,605.12         |
| 23-Feb-15 |       |      | 0      | 90.86             |               |                | Rp 69,605.12  | Rp 69,605.12         |
| 24-Feb-15 |       |      | 0      | 90.86             |               |                | Rp 69,605.12  | Rp 69,605.12         |
| 25-Feb-15 |       |      | 0.41   | 90.45             |               |                | Rp 69,291.03  | Rp 69,291.03         |
| 26-Feb-15 |       |      | 0      | 90.45             |               |                | Rp 69,291.03  | Rp 69,291.03         |
| 27-Feb-15 |       |      | 0      | 90.45             |               |                | Rp 69,291.03  | Rp 69,291.03         |
| 28-Feb-15 | 10.9  |      | 0      | 90.45             | Rp 131,774.28 |                | Rp 69,291.03  | Rp 201,065.31        |
| 1-Mar-15  |       |      | 0      | 90.45             |               |                | Rp 69,291.03  | Rp 69,291.03         |
| 2-Mar-15  |       |      | 2.49   | 87.96             |               |                | Rp 67,383.52  | Rp 67,383.52         |
| 3-Mar-15  |       | 10.9 | 0      | 98.86             |               |                | Rp 75,733.68  | Rp 75,733.68         |
| 4-Mar-15  |       |      | 0      | 98.86             |               |                | Rp 75,733.68  | Rp 75,733.68         |
| 5-Mar-15  |       |      | 0      | 98.86             |               |                | Rp 75,733.68  | Rp 75,733.68         |
| 6-Mar-15  |       |      | 0      | 98.86             |               |                | Rp 75,733.68  | Rp 75,733.68         |
| 7-Mar-15  |       |      | 0      | 98.86             |               |                | Rp 75,733.68  | Rp 75,733.68         |
| 8-Mar-15  |       |      | 0.2    | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 9-Mar-15  |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 10-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 11-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 12-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 13-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 14-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 15-Mar-15 | 10.9  |      | 0      | 98.66             | Rp 131,774.28 |                | Rp 75,580.47  | Rp 207,354.75        |
| 16-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 17-Mar-15 |       |      | 0      | 98.66             |               |                | Rp 75,580.47  | Rp 75,580.47         |
| 18-Mar-15 |       | 10.9 | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 19-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 20-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 21-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 22-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 23-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 24-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 25-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 26-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 27-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 28-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 29-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 30-Mar-15 |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 31-Mar-15 | 10.9  |      | 0      | 109.56            | Rp 131,774.28 |                | Rp 83,930.63  | Rp 215,704.91        |
| 1-Apr-15  |       |      | 0      | 109.56            |               |                | Rp 83,930.63  | Rp 83,930.63         |
| 2-Apr-15  |       | 10.9 | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 3-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 4-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 5-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 6-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 7-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 8-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 9-Apr-15  |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 10-Apr-15 |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 11-Apr-15 |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 12-Apr-15 |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 13-Apr-15 |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 14-Apr-15 |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 15-Apr-15 | 10.9  |      | 0      | 120.46            | Rp 131,774.28 |                | Rp 92,280.79  | Rp 224,055.07        |
| 16-Apr-15 |       |      | 0      | 120.46            |               |                | Rp 92,280.79  | Rp 92,280.79         |
| 17-Apr-15 |       | 10.9 | 0      | 131.36            |               |                | Rp 100,630.96 | Rp 100,630.96        |
| 18-Apr-15 |       |      | 3.66   | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 19-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 20-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 21-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 22-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 23-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 24-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 25-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 26-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 27-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 28-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 29-Apr-15 |       |      | 0      | 127.7             |               |                | Rp 97,827.14  | Rp 97,827.14         |
| 30-Apr-15 | 10.9  |      | 0      | 127.7             | Rp 131,774.28 |                | Rp 97,827.14  | Rp 229,601.42        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 1-May-15  |       |      | 1.16   | 126.54            |               |                | Rp 96,938.50  | Rp 96,938.50         |
| 2-May-15  |       | 10.9 | 0      | 137.44            |               |                | Rp 105,288.66 | Rp 105,288.66        |
| 3-May-15  |       |      | 0      | 137.44            |               |                | Rp 105,288.66 | Rp 105,288.66        |
| 4-May-15  |       |      | 0      | 137.44            |               |                | Rp 105,288.66 | Rp 105,288.66        |
| 5-May-15  |       |      | 0      | 137.44            |               |                | Rp 105,288.66 | Rp 105,288.66        |
| 6-May-15  |       |      | 0      | 137.44            |               |                | Rp 105,288.66 | Rp 105,288.66        |
| 7-May-15  |       |      | 0      | 137.44            |               |                | Rp 105,288.66 | Rp 105,288.66        |
| 8-May-15  |       |      | 2.58   | 134.86            |               |                | Rp 103,312.20 | Rp 103,312.20        |
| 9-May-15  |       |      | 0      | 134.86            |               |                | Rp 103,312.20 | Rp 103,312.20        |
| 10-May-15 |       |      | 2.18   | 132.68            |               |                | Rp 101,642.17 | Rp 101,642.17        |
| 11-May-15 |       |      | 0      | 132.68            |               |                | Rp 101,642.17 | Rp 101,642.17        |
| 12-May-15 |       |      | 0      | 132.68            |               |                | Rp 101,642.17 | Rp 101,642.17        |
| 13-May-15 |       |      | 0.43   | 132.25            |               |                | Rp 101,312.76 | Rp 101,312.76        |
| 14-May-15 |       |      | 0      | 132.25            |               |                | Rp 101,312.76 | Rp 101,312.76        |
| 15-May-15 | 10.9  |      | 0      | 132.25            | Rp 131,774.28 |                | Rp 101,312.76 | Rp 233,087.04        |
| 16-May-15 |       |      | 0      | 132.25            |               |                | Rp 101,312.76 | Rp 101,312.76        |
| 17-May-15 |       |      | 0      | 132.25            |               |                | Rp 101,312.76 | Rp 101,312.76        |
| 18-May-15 |       | 10.9 | 0      | 143.15            |               |                | Rp 109,662.92 | Rp 109,662.92        |
| 19-May-15 |       |      | 0      | 143.15            |               |                | Rp 109,662.92 | Rp 109,662.92        |
| 20-May-15 |       |      | 0      | 143.15            |               |                | Rp 109,662.92 | Rp 109,662.92        |
| 21-May-15 |       |      | 8.42   | 134.73            |               |                | Rp 103,212.61 | Rp 103,212.61        |
| 22-May-15 |       |      | 0      | 134.73            |               |                | Rp 103,212.61 | Rp 103,212.61        |
| 23-May-15 |       |      | 1.5    | 133.23            |               |                | Rp 102,063.51 | Rp 102,063.51        |
| 24-May-15 |       |      | 0      | 133.23            |               |                | Rp 102,063.51 | Rp 102,063.51        |
| 25-May-15 |       |      | 0      | 133.23            |               |                | Rp 102,063.51 | Rp 102,063.51        |
| 26-May-15 |       |      | 8.14   | 125.09            |               |                | Rp 95,827.70  | Rp 95,827.70         |
| 27-May-15 |       |      | 0      | 125.09            |               |                | Rp 95,827.70  | Rp 95,827.70         |
| 28-May-15 |       |      | 0      | 125.09            |               |                | Rp 95,827.70  | Rp 95,827.70         |
| 29-May-15 |       |      | 0      | 125.09            |               |                | Rp 95,827.70  | Rp 95,827.70         |
| 30-May-15 |       |      | 0      | 125.09            |               |                | Rp 95,827.70  | Rp 95,827.70         |
| 31-May-15 | 10.9  |      | 1      | 124.09            | Rp 131,774.28 |                | Rp 95,061.63  | Rp 226,835.91        |
| 1-Jun-15  |       |      | 0      | 124.09            |               |                | Rp 95,061.63  | Rp 95,061.63         |
| 2-Jun-15  |       |      | 0      | 124.09            |               |                | Rp 95,061.63  | Rp 95,061.63         |
| 3-Jun-15  |       | 10.9 | 0      | 134.99            |               |                | Rp 103,411.79 | Rp 103,411.79        |
| 4-Jun-15  |       |      | 0      | 134.99            |               |                | Rp 103,411.79 | Rp 103,411.79        |
| 5-Jun-15  |       |      | 1.78   | 133.21            |               |                | Rp 102,048.18 | Rp 102,048.18        |
| 6-Jun-15  |       |      | 0      | 133.21            |               |                | Rp 102,048.18 | Rp 102,048.18        |
| 7-Jun-15  |       |      | 0      | 133.21            |               |                | Rp 102,048.18 | Rp 102,048.18        |
| 8-Jun-15  |       |      | 0      | 133.21            |               |                | Rp 102,048.18 | Rp 102,048.18        |
| 9-Jun-15  |       |      | 1.74   | 131.47            |               |                | Rp 100,715.22 | Rp 100,715.22        |
| 10-Jun-15 |       |      | 0      | 131.47            |               |                | Rp 100,715.22 | Rp 100,715.22        |
| 11-Jun-15 |       |      | 0      | 131.47            |               |                | Rp 100,715.22 | Rp 100,715.22        |
| 12-Jun-15 |       |      | 0      | 131.47            |               |                | Rp 100,715.22 | Rp 100,715.22        |
| 13-Jun-15 |       |      | 0      | 131.47            |               |                | Rp 100,715.22 | Rp 100,715.22        |
| 14-Jun-15 |       |      | 17.31  | 114.16            |               |                | Rp 87,454.55  | Rp 87,454.55         |
| 15-Jun-15 | 10.9  |      | 0      | 114.16            | Rp 131,774.28 |                | Rp 87,454.55  | Rp 219,228.83        |
| 16-Jun-15 |       |      | 0      | 114.16            |               |                | Rp 87,454.55  | Rp 87,454.55         |
| 17-Jun-15 |       |      | 0      | 114.16            |               |                | Rp 87,454.55  | Rp 87,454.55         |
| 18-Jun-15 |       | 10.9 | 1.54   | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 19-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 20-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 21-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 22-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 23-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 24-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 25-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 26-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 27-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 28-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 29-Jun-15 |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 30-Jun-15 | 10.9  |      | 0      | 123.52            | Rp 131,774.28 |                | Rp 94,624.97  | Rp 226,399.25        |
| 1-Jul-15  |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 2-Jul-15  |       |      | 0      | 123.52            |               |                | Rp 94,624.97  | Rp 94,624.97         |
| 3-Jul-15  |       | 10.9 | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 4-Jul-15  |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 5-Jul-15  |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 6-Jul-15  |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 7-Jul-15  |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 8-Jul-15  |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 9-Jul-15  |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 10-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 11-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 12-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 13-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 14-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 15-Jul-15 | 10.9  |      | 0      | 134.42            | Rp 131,774.28 |                | Rp 102,975.13 | Rp 234,749.41        |
| 16-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 17-Jul-15 |       |      | 0      | 134.42            |               |                | Rp 102,975.13 | Rp 102,975.13        |
| 18-Jul-15 |       |      | 2.12   | 132.3             |               |                | Rp 101,351.06 | Rp 101,351.06        |
| 19-Jul-15 |       | 10.9 | 0      | 143.2             |               |                | Rp 109,701.22 | Rp 109,701.22        |
| 20-Jul-15 |       |      | 0      | 143.2             |               |                | Rp 109,701.22 | Rp 109,701.22        |
| 21-Jul-15 |       |      | 0      | 143.2             |               |                | Rp 109,701.22 | Rp 109,701.22        |
| 22-Jul-15 |       |      | 0      | 143.2             |               |                | Rp 109,701.22 | Rp 109,701.22        |
| 23-Jul-15 |       |      | 9.09   | 134.11            |               |                | Rp 102,737.65 | Rp 102,737.65        |
| 24-Jul-15 |       |      | 0      | 134.11            |               |                | Rp 102,737.65 | Rp 102,737.65        |
| 25-Jul-15 |       |      | 0      | 134.11            |               |                | Rp 102,737.65 | Rp 102,737.65        |
| 26-Jul-15 |       |      | 0.45   | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 27-Jul-15 |       |      | 0      | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 28-Jul-15 |       |      | 0      | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 29-Jul-15 |       |      | 0      | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 30-Jul-15 |       |      | 0      | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 31-Jul-15 | 10.9  |      | 0      | 133.66            | Rp 131,774.28 |                | Rp 102,392.92 | Rp 234,167.20        |
| 1-Aug-15  |       |      | 0      | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 2-Aug-15  |       |      | 0      | 133.66            |               |                | Rp 102,392.92 | Rp 102,392.92        |
| 3-Aug-15  |       | 10.9 | 0      | 144.56            |               |                | Rp 110,743.08 | Rp 110,743.08        |
| 4-Aug-15  |       |      | 0      | 144.56            |               |                | Rp 110,743.08 | Rp 110,743.08        |
| 5-Aug-15  |       |      | 0      | 144.56            |               |                | Rp 110,743.08 | Rp 110,743.08        |
| 6-Aug-15  |       |      | 0      | 144.56            |               |                | Rp 110,743.08 | Rp 110,743.08        |
| 7-Aug-15  |       |      | 3.92   | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 8-Aug-15  |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 9-Aug-15  |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 10-Aug-15 |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 11-Aug-15 |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 12-Aug-15 |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 13-Aug-15 |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 14-Aug-15 |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 15-Aug-15 | 10.9  |      | 0      | 140.64            | Rp 131,774.28 |                | Rp 107,740.08 | Rp 239,514.36        |
| 16-Aug-15 |       |      | 0      | 140.64            |               |                | Rp 107,740.08 | Rp 107,740.08        |
| 17-Aug-15 |       |      | 1.45   | 139.19            |               |                | Rp 106,629.28 | Rp 106,629.28        |
| 18-Aug-15 |       | 10.9 | 0      | 150.09            |               |                | Rp 114,979.45 | Rp 114,979.45        |
| 19-Aug-15 |       |      | 0      | 150.09            |               |                | Rp 114,979.45 | Rp 114,979.45        |
| 20-Aug-15 |       |      | 3.91   | 146.18            |               |                | Rp 111,984.11 | Rp 111,984.11        |
| 21-Aug-15 |       |      | 9.5    | 136.68            |               |                | Rp 104,706.45 | Rp 104,706.45        |
| 22-Aug-15 |       |      | 0      | 136.68            |               |                | Rp 104,706.45 | Rp 104,706.45        |
| 23-Aug-15 |       |      | 0      | 136.68            |               |                | Rp 104,706.45 | Rp 104,706.45        |
| 24-Aug-15 |       |      | 8.87   | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 25-Aug-15 |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 26-Aug-15 |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 27-Aug-15 |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 28-Aug-15 |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 29-Aug-15 |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 30-Aug-15 |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 31-Aug-15 | 10.9  |      | 0      | 127.81            | Rp 131,774.28 |                | Rp 97,911.41  | Rp 229,685.69        |
| 1-Sep-15  |       |      | 0      | 127.81            |               |                | Rp 97,911.41  | Rp 97,911.41         |
| 2-Sep-15  |       | 10.9 | 0      | 138.71            |               |                | Rp 106,261.57 | Rp 106,261.57        |
| 3-Sep-15  |       |      | 0      | 138.71            |               |                | Rp 106,261.57 | Rp 106,261.57        |
| 4-Sep-15  |       |      | 0      | 138.71            |               |                | Rp 106,261.57 | Rp 106,261.57        |
| 5-Sep-15  |       |      | 0      | 138.71            |               |                | Rp 106,261.57 | Rp 106,261.57        |
| 6-Sep-15  |       |      | 0      | 138.71            |               |                | Rp 106,261.57 | Rp 106,261.57        |
| 7-Sep-15  |       |      | 1.04   | 137.67            |               |                | Rp 105,464.86 | Rp 105,464.86        |
| 8-Sep-15  |       |      | 0      | 137.67            |               |                | Rp 105,464.86 | Rp 105,464.86        |
| 9-Sep-15  |       |      | 0      | 137.67            |               |                | Rp 105,464.86 | Rp 105,464.86        |
| 10-Sep-15 |       |      | 0      | 137.67            |               |                | Rp 105,464.86 | Rp 105,464.86        |
| 11-Sep-15 |       |      | 0.71   | 136.96            |               |                | Rp 104,920.95 | Rp 104,920.95        |
| 12-Sep-15 |       |      | 0      | 136.96            |               |                | Rp 104,920.95 | Rp 104,920.95        |
| 13-Sep-15 |       |      | 0      | 136.96            |               |                | Rp 104,920.95 | Rp 104,920.95        |
| 14-Sep-15 |       |      | 0      | 136.96            |               |                | Rp 104,920.95 | Rp 104,920.95        |
| 15-Sep-15 | 10.9  |      | 0.71   | 136.25            | Rp 131,774.28 |                | Rp 104,377.04 | Rp 236,151.32        |
| 16-Sep-15 |       |      | 0      | 136.25            |               |                | Rp 104,377.04 | Rp 104,377.04        |
| 17-Sep-15 |       |      | 0      | 136.25            |               |                | Rp 104,377.04 | Rp 104,377.04        |
| 18-Sep-15 |       | 10.9 | 0      | 147.15            |               |                | Rp 112,727.20 | Rp 112,727.20        |
| 19-Sep-15 |       |      | 0      | 147.15            |               |                | Rp 112,727.20 | Rp 112,727.20        |
| 20-Sep-15 |       |      | 0      | 147.15            |               |                | Rp 112,727.20 | Rp 112,727.20        |
| 21-Sep-15 |       |      | 0      | 147.15            |               |                | Rp 112,727.20 | Rp 112,727.20        |
| 22-Sep-15 |       |      | 0.92   | 146.23            |               |                | Rp 112,022.42 | Rp 112,022.42        |
| 23-Sep-15 |       |      | 3.17   | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |
| 24-Sep-15 |       |      | 0      | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |
| 25-Sep-15 |       |      | 0      | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 26-Sep-15 |       |      | 0      | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |
| 27-Sep-15 |       |      | 0      | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |
| 28-Sep-15 |       |      | 0      | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |
| 29-Sep-15 |       |      | 0      | 143.06            |               |                | Rp 109,593.97 | Rp 109,593.97        |
| 30-Sep-15 | 10.9  |      | 0      | 143.06            | Rp 131,774.28 |                | Rp 109,593.97 | Rp 241,368.25        |
| 1-Oct-15  |       |      | 3.63   | 139.43            |               |                | Rp 106,813.14 | Rp 106,813.14        |
| 2-Oct-15  |       |      | 0      | 139.43            |               |                | Rp 106,813.14 | Rp 106,813.14        |
| 3-Oct-15  |       |      | 0      | 139.43            |               |                | Rp 106,813.14 | Rp 106,813.14        |
| 4-Oct-15  |       |      | 2.37   | 137.06            |               |                | Rp 104,997.55 | Rp 104,997.55        |
| 5-Oct-15  |       |      | 0      | 137.06            |               |                | Rp 104,997.55 | Rp 104,997.55        |
| 6-Oct-15  |       | 10.9 | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 7-Oct-15  |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 8-Oct-15  |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 9-Oct-15  |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 10-Oct-15 |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 11-Oct-15 |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 12-Oct-15 |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 13-Oct-15 |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 14-Oct-15 |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 15-Oct-15 | 10.9  |      | 0      | 147.96            | Rp 131,774.28 |                | Rp 113,347.72 | Rp 245,122.00        |
| 16-Oct-15 |       |      | 0      | 147.96            |               |                | Rp 113,347.72 | Rp 113,347.72        |
| 17-Oct-15 |       | 10.9 | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 18-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 19-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 20-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 21-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 22-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 23-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 24-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 25-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 26-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 27-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 28-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 29-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 30-Oct-15 |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 31-Oct-15 | 10.9  |      | 0      | 158.86            | Rp 131,774.28 |                | Rp 121,697.88 | Rp 253,472.16        |
| 1-Nov-15  |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 2-Nov-15  |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 3-Nov-15  |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 4-Nov-15  |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 5-Nov-15  |       |      | 0      | 158.86            |               |                | Rp 121,697.88 | Rp 121,697.88        |
| 6-Nov-15  |       | 10.9 | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 7-Nov-15  |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 8-Nov-15  |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 9-Nov-15  |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 10-Nov-15 |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 11-Nov-15 |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 12-Nov-15 |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 13-Nov-15 |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 14-Nov-15 |       |      | 0      | 169.76            |               |                | Rp 130,048.04 | Rp 130,048.04        |
| 15-Nov-15 | 10.9  |      | 1.01   | 168.75            | Rp 131,774.28 |                | Rp 129,274.31 | Rp 261,048.59        |
| 16-Nov-15 |       |      | 0      | 168.75            |               |                | Rp 129,274.31 | Rp 129,274.31        |
| 17-Nov-15 |       |      | 16.38  | 152.37            |               |                | Rp 116,726.09 | Rp 116,726.09        |
| 18-Nov-15 |       |      | 0      | 152.37            |               |                | Rp 116,726.09 | Rp 116,726.09        |
| 19-Nov-15 |       | 10.9 | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 20-Nov-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 21-Nov-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 22-Nov-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 23-Nov-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 24-Nov-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 25-Nov-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 26-Nov-15 |       |      | 1.05   | 162.22            |               |                | Rp 124,271.88 | Rp 124,271.88        |
| 27-Nov-15 |       |      | 0.61   | 161.61            |               |                | Rp 123,804.57 | Rp 123,804.57        |
| 28-Nov-15 |       |      | 0      | 161.61            |               |                | Rp 123,804.57 | Rp 123,804.57        |
| 29-Nov-15 |       |      | 0      | 161.61            |               |                | Rp 123,804.57 | Rp 123,804.57        |
| 30-Nov-15 | 10.9  |      | 0      | 161.61            | Rp 131,774.28 |                | Rp 123,804.57 | Rp 255,578.85        |
| 1-Dec-15  |       | 10.9 | 0      | 172.51            |               |                | Rp 132,154.74 | Rp 132,154.74        |
| 2-Dec-15  |       |      | 7.8    | 164.71            |               |                | Rp 126,179.39 | Rp 126,179.39        |
| 3-Dec-15  |       |      | 0      | 164.71            |               |                | Rp 126,179.39 | Rp 126,179.39        |
| 4-Dec-15  |       |      | 0      | 164.71            |               |                | Rp 126,179.39 | Rp 126,179.39        |
| 5-Dec-15  |       |      | 0      | 164.71            |               |                | Rp 126,179.39 | Rp 126,179.39        |
| 6-Dec-15  |       |      | 0      | 164.71            |               |                | Rp 126,179.39 | Rp 126,179.39        |
| 7-Dec-15  |       |      | 8.77   | 155.94            |               |                | Rp 119,460.96 | Rp 119,460.96        |
| 8-Dec-15  |       |      | 2.78   | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 9-Dec-15  |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 10-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 11-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 12-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 13-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 14-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 15-Dec-15 | 10.9  |      | 0      | 153.16            | Rp 131,774.28 |                | Rp 117,331.28 | Rp 249,105.56        |
| 16-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 17-Dec-15 |       |      | 0      | 153.16            |               |                | Rp 117,331.28 | Rp 117,331.28        |
| 18-Dec-15 |       |      | 0.79   | 152.37            |               |                | Rp 116,726.09 | Rp 116,726.09        |
| 19-Dec-15 |       | 10.9 | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 20-Dec-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 21-Dec-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 22-Dec-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 23-Dec-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 24-Dec-15 |       |      | 0      | 163.27            |               |                | Rp 125,076.25 | Rp 125,076.25        |
| 25-Dec-15 |       |      | 17.29  | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
| 26-Dec-15 |       |      | 0      | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
| 27-Dec-15 |       |      | 0      | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
| 28-Dec-15 |       |      | 0      | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
| 29-Dec-15 |       |      | 0      | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
| 30-Dec-15 |       |      | 0      | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
| 31-Dec-15 |       |      | 0      | 145.98            |               |                | Rp 111,830.90 | Rp 111,830.90        |
|           |       |      |        |                   |               |                |               | Rp 39,176,779.53     |

## Replication 5

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 6.11   | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 4-Jan-15  |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 5-Jan-15  |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 6-Jan-15  |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 7-Jan-15  |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 8-Jan-15  |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 9-Jan-15  |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 10-Jan-15 |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 11-Jan-15 |       |      | 0      | 78.64             |               |                | Rp 60,243.74 | Rp 60,243.74         |
| 12-Jan-15 |       |      | 8.43   | 70.21             |               |                | Rp 53,785.77 | Rp 53,785.77         |
| 13-Jan-15 |       |      | 0      | 70.21             |               |                | Rp 53,785.77 | Rp 53,785.77         |
| 14-Jan-15 |       |      | 0      | 70.21             |               |                | Rp 53,785.77 | Rp 53,785.77         |
| 15-Jan-15 | 10.9  |      | 0      | 70.21             | Rp 131,774.28 |                | Rp 53,785.77 | Rp 185,560.05        |
| 16-Jan-15 |       |      | 0      | 70.21             |               |                | Rp 53,785.77 | Rp 53,785.77         |
| 17-Jan-15 |       | 10.9 | 0      | 81.11             |               |                | Rp 62,135.94 | Rp 62,135.94         |
| 18-Jan-15 |       |      | 0      | 81.11             |               |                | Rp 62,135.94 | Rp 62,135.94         |
| 19-Jan-15 |       |      | 0.84   | 80.27             |               |                | Rp 61,492.44 | Rp 61,492.44         |
| 20-Jan-15 |       |      | 0      | 80.27             |               |                | Rp 61,492.44 | Rp 61,492.44         |
| 21-Jan-15 |       |      | 2.63   | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 22-Jan-15 |       |      | 0      | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 23-Jan-15 |       |      | 0      | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 24-Jan-15 |       |      | 0      | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 25-Jan-15 |       |      | 0      | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 26-Jan-15 |       |      | 0      | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 27-Jan-15 |       |      | 0      | 77.64             |               |                | Rp 59,477.67 | Rp 59,477.67         |
| 28-Jan-15 |       |      | 18.74  | 58.9              |               |                | Rp 45,121.52 | Rp 45,121.52         |
| 29-Jan-15 |       |      | 0      | 58.9              |               |                | Rp 45,121.52 | Rp 45,121.52         |
| 30-Jan-15 |       |      | 0.27   | 58.63             |               |                | Rp 44,914.68 | Rp 44,914.68         |
| 31-Jan-15 | 10.9  |      | 0      | 58.63             | Rp 131,774.28 |                | Rp 44,914.68 | Rp 176,688.96        |
| 1-Feb-15  |       |      | 1.73   | 56.9              |               |                | Rp 43,589.38 | Rp 43,589.38         |
| 2-Feb-15  |       |      | 0      | 56.9              |               |                | Rp 43,589.38 | Rp 43,589.38         |
| 3-Feb-15  |       | 10.9 | 0      | 67.8              |               |                | Rp 51,939.55 | Rp 51,939.55         |
| 4-Feb-15  |       |      | 0      | 67.8              |               |                | Rp 51,939.55 | Rp 51,939.55         |
| 5-Feb-15  |       |      | 0      | 67.8              |               |                | Rp 51,939.55 | Rp 51,939.55         |
| 6-Feb-15  |       |      | 0.62   | 67.18             |               |                | Rp 51,464.58 | Rp 51,464.58         |
| 7-Feb-15  |       |      | 0      | 67.18             |               |                | Rp 51,464.58 | Rp 51,464.58         |
| 8-Feb-15  |       |      | 1.97   | 65.21             |               |                | Rp 49,955.42 | Rp 49,955.42         |
| 9-Feb-15  |       |      | 0      | 65.21             |               |                | Rp 49,955.42 | Rp 49,955.42         |
| 10-Feb-15 |       |      | 0      | 65.21             |               |                | Rp 49,955.42 | Rp 49,955.42         |
| 11-Feb-15 |       |      | 3.43   | 61.78             |               |                | Rp 47,327.80 | Rp 47,327.80         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 12-Feb-15 |       |      | 0      | 61.78             |               |                | Rp 47,327.80 | Rp 47,327.80         |
| 13-Feb-15 |       |      | 0      | 61.78             |               |                | Rp 47,327.80 | Rp 47,327.80         |
| 14-Feb-15 |       |      | 1.87   | 59.91             |               |                | Rp 45,895.25 | Rp 45,895.25         |
| 15-Feb-15 | 10.9  |      | 0      | 59.91             | Rp 131,774.28 |                | Rp 45,895.25 | Rp 177,669.53        |
| 16-Feb-15 |       |      | 0      | 59.91             |               |                | Rp 45,895.25 | Rp 45,895.25         |
| 17-Feb-15 |       |      | 0      | 59.91             |               |                | Rp 45,895.25 | Rp 45,895.25         |
| 18-Feb-15 |       | 10.9 | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 19-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 20-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 21-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 22-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 23-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 24-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 25-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 26-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 27-Feb-15 |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 28-Feb-15 | 10.9  |      | 0      | 70.81             | Rp 131,774.28 |                | Rp 54,245.42 | Rp 186,019.70        |
| 1-Mar-15  |       |      | 0      | 70.81             |               |                | Rp 54,245.42 | Rp 54,245.42         |
| 2-Mar-15  |       |      | 0.04   | 70.77             |               |                | Rp 54,214.77 | Rp 54,214.77         |
| 3-Mar-15  |       |      | 0      | 70.77             |               |                | Rp 54,214.77 | Rp 54,214.77         |
| 4-Mar-15  |       |      | 0      | 70.77             |               |                | Rp 54,214.77 | Rp 54,214.77         |
| 5-Mar-15  |       |      | 0      | 70.77             |               |                | Rp 54,214.77 | Rp 54,214.77         |
| 6-Mar-15  |       |      | 0      | 70.77             |               |                | Rp 54,214.77 | Rp 54,214.77         |
| 7-Mar-15  |       |      | 0      | 70.77             |               |                | Rp 54,214.77 | Rp 54,214.77         |
| 8-Mar-15  |       | 10.9 | 0      | 81.67             |               |                | Rp 62,564.94 | Rp 62,564.94         |
| 9-Mar-15  |       |      | 0      | 81.67             |               |                | Rp 62,564.94 | Rp 62,564.94         |
| 10-Mar-15 |       |      | 0      | 81.67             |               |                | Rp 62,564.94 | Rp 62,564.94         |
| 11-Mar-15 |       |      | 0      | 81.67             |               |                | Rp 62,564.94 | Rp 62,564.94         |
| 12-Mar-15 |       |      | 0      | 81.67             |               |                | Rp 62,564.94 | Rp 62,564.94         |
| 13-Mar-15 |       |      | 0      | 81.67             |               |                | Rp 62,564.94 | Rp 62,564.94         |
| 14-Mar-15 |       |      | 3.45   | 78.22             |               |                | Rp 59,922.00 | Rp 59,922.00         |
| 15-Mar-15 | 10.9  |      | 0      | 78.22             | Rp 131,774.28 |                | Rp 59,922.00 | Rp 191,696.28        |
| 16-Mar-15 |       |      | 0      | 78.22             |               |                | Rp 59,922.00 | Rp 59,922.00         |
| 17-Mar-15 |       | 10.9 | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 18-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 19-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 20-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 21-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 22-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 23-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 24-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 25-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 26-Mar-15 |       |      | 0      | 89.12             |               |                | Rp 68,272.16 | Rp 68,272.16         |
| 27-Mar-15 |       |      | 4.43   | 84.69             |               |                | Rp 64,878.47 | Rp 64,878.47         |
| 28-Mar-15 |       |      | 0      | 84.69             |               |                | Rp 64,878.47 | Rp 64,878.47         |
| 29-Mar-15 |       |      | 0      | 84.69             |               |                | Rp 64,878.47 | Rp 64,878.47         |
| 30-Mar-15 |       |      | 0      | 84.69             |               |                | Rp 64,878.47 | Rp 64,878.47         |
| 31-Mar-15 | 10.9  |      | 0      | 84.69             | Rp 131,774.28 |                | Rp 64,878.47 | Rp 196,652.75        |
| 1-Apr-15  |       |      | 0      | 84.69             |               |                | Rp 64,878.47 | Rp 64,878.47         |
| 2-Apr-15  |       |      | 1.38   | 83.31             |               |                | Rp 63,821.29 | Rp 63,821.29         |
| 3-Apr-15  |       |      | 0      | 83.31             |               |                | Rp 63,821.29 | Rp 63,821.29         |
| 4-Apr-15  |       | 10.9 | 0      | 94.21             |               |                | Rp 72,171.45 | Rp 72,171.45         |
| 5-Apr-15  |       |      | 0      | 94.21             |               |                | Rp 72,171.45 | Rp 72,171.45         |
| 6-Apr-15  |       |      | 8.33   | 85.88             |               |                | Rp 65,790.09 | Rp 65,790.09         |
| 7-Apr-15  |       |      | 0      | 85.88             |               |                | Rp 65,790.09 | Rp 65,790.09         |
| 8-Apr-15  |       |      | 0      | 85.88             |               |                | Rp 65,790.09 | Rp 65,790.09         |
| 9-Apr-15  |       |      | 0      | 85.88             |               |                | Rp 65,790.09 | Rp 65,790.09         |
| 10-Apr-15 |       |      | 0      | 85.88             |               |                | Rp 65,790.09 | Rp 65,790.09         |
| 11-Apr-15 |       |      | 2.66   | 83.22             |               |                | Rp 63,752.35 | Rp 63,752.35         |
| 12-Apr-15 |       |      | 0      | 83.22             |               |                | Rp 63,752.35 | Rp 63,752.35         |
| 13-Apr-15 |       |      | 0      | 83.22             |               |                | Rp 63,752.35 | Rp 63,752.35         |
| 14-Apr-15 |       |      | 0      | 83.22             |               |                | Rp 63,752.35 | Rp 63,752.35         |
| 15-Apr-15 | 10.9  |      | 0      | 83.22             | Rp 131,774.28 |                | Rp 63,752.35 | Rp 195,526.63        |
| 16-Apr-15 |       |      | 0      | 83.22             |               |                | Rp 63,752.35 | Rp 63,752.35         |
| 17-Apr-15 |       |      | 3.66   | 79.56             |               |                | Rp 60,948.53 | Rp 60,948.53         |
| 18-Apr-15 |       | 10.9 | 0      | 90.46             |               |                | Rp 69,298.69 | Rp 69,298.69         |
| 19-Apr-15 |       |      | 1.4    | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 20-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 21-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 22-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 23-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 24-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 25-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |
| 26-Apr-15 |       |      | 0      | 89.06             |               |                | Rp 68,226.19 | Rp 68,226.19         |



| Date      | Order | In   | Demand | Inventory<br>On Hand | Order Cost    | Stock out<br>Cost | Holding Cost  | Daily Inventory<br>Cost |
|-----------|-------|------|--------|----------------------|---------------|-------------------|---------------|-------------------------|
| 27-Apr-15 |       |      | 0      | 89.06                |               |                   | Rp 68,226.19  | Rp 68,226.19            |
| 28-Apr-15 |       |      | 0      | 89.06                |               |                   | Rp 68,226.19  | Rp 68,226.19            |
| 29-Apr-15 |       |      | 0      | 89.06                |               |                   | Rp 68,226.19  | Rp 68,226.19            |
| 30-Apr-15 | 10.9  |      | 1.48   | 87.58                | Rp 131,774.28 |                   | Rp 67,092.41  | Rp 198,866.69           |
| 1-May-15  |       |      | 0      | 87.58                |               |                   | Rp 67,092.41  | Rp 67,092.41            |
| 2-May-15  |       |      | 0      | 87.58                |               |                   | Rp 67,092.41  | Rp 67,092.41            |
| 3-May-15  |       |      | 0      | 87.58                |               |                   | Rp 67,092.41  | Rp 67,092.41            |
| 4-May-15  |       |      | 0      | 87.58                |               |                   | Rp 67,092.41  | Rp 67,092.41            |
| 5-May-15  |       |      | 0      | 87.58                |               |                   | Rp 67,092.41  | Rp 67,092.41            |
| 6-May-15  |       | 10.9 | 0      | 98.48                |               |                   | Rp 75,442.57  | Rp 75,442.57            |
| 7-May-15  |       |      | 1.11   | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 8-May-15  |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 9-May-15  |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 10-May-15 |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 11-May-15 |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 12-May-15 |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 13-May-15 |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 14-May-15 |       |      | 0      | 97.37                |               |                   | Rp 74,592.24  | Rp 74,592.24            |
| 15-May-15 | 10.9  |      | 0      | 97.37                | Rp 131,774.28 |                   | Rp 74,592.24  | Rp 206,366.52           |
| 16-May-15 |       |      | 1.92   | 95.45                |               |                   | Rp 73,121.38  | Rp 73,121.38            |
| 17-May-15 |       | 10.9 | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 18-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 19-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 20-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 21-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 22-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 23-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 24-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 25-May-15 |       |      | 0      | 106.35               |               |                   | Rp 81,471.54  | Rp 81,471.54            |
| 26-May-15 |       |      | 1.89   | 104.46               |               |                   | Rp 80,023.67  | Rp 80,023.67            |
| 27-May-15 |       |      | 2.07   | 102.39               |               |                   | Rp 78,437.91  | Rp 78,437.91            |
| 28-May-15 |       |      | 0      | 102.39               |               |                   | Rp 78,437.91  | Rp 78,437.91            |
| 29-May-15 |       |      | 0      | 102.39               |               |                   | Rp 78,437.91  | Rp 78,437.91            |
| 30-May-15 |       |      | 0      | 102.39               |               |                   | Rp 78,437.91  | Rp 78,437.91            |
| 31-May-15 | 10.9  |      | 0      | 102.39               | Rp 131,774.28 |                   | Rp 78,437.91  | Rp 210,212.19           |
| 1-Jun-15  |       |      | 0      | 102.39               |               |                   | Rp 78,437.91  | Rp 78,437.91            |
| 2-Jun-15  |       |      | 0      | 102.39               |               |                   | Rp 78,437.91  | Rp 78,437.91            |
| 3-Jun-15  |       | 10.9 | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 4-Jun-15  |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 5-Jun-15  |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 6-Jun-15  |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 7-Jun-15  |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 8-Jun-15  |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 9-Jun-15  |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 10-Jun-15 |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 11-Jun-15 |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 12-Jun-15 |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 13-Jun-15 |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 14-Jun-15 |       |      | 0      | 113.29               |               |                   | Rp 86,788.07  | Rp 86,788.07            |
| 15-Jun-15 | 10.9  |      | 0      | 113.29               | Rp 131,774.28 |                   | Rp 86,788.07  | Rp 218,562.35           |
| 16-Jun-15 |       | 10.9 | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 17-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 18-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 19-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 20-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 21-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 22-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 23-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 24-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 25-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 26-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 27-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 28-Jun-15 |       |      | 0      | 124.19               |               |                   | Rp 95,138.23  | Rp 95,138.23            |
| 29-Jun-15 |       |      | 4.15   | 120.04               |               |                   | Rp 91,959.04  | Rp 91,959.04            |
| 30-Jun-15 | 10.9  |      | 0      | 120.04               | Rp 131,774.28 |                   | Rp 91,959.04  | Rp 223,733.32           |
| 1-Jul-15  |       |      | 0      | 120.04               |               |                   | Rp 91,959.04  | Rp 91,959.04            |
| 2-Jul-15  |       | 10.9 | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 3-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 4-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 5-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 6-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 7-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 8-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |
| 9-Jul-15  |       |      | 0      | 130.94               |               |                   | Rp 100,309.21 | Rp 100,309.21           |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 10-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 11-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 12-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 13-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 14-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 15-Jul-15 | 10.9  |      | 0      | 130.94            | Rp 131,774.28 |                | Rp 100,309.21 | Rp 232,083.49        |
| 16-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 17-Jul-15 |       |      | 0      | 130.94            |               |                | Rp 100,309.21 | Rp 100,309.21        |
| 18-Jul-15 |       | 10.9 | 3.3    | 138.54            |               |                | Rp 106,131.34 | Rp 106,131.34        |
| 19-Jul-15 |       |      | 0      | 138.54            |               |                | Rp 106,131.34 | Rp 106,131.34        |
| 20-Jul-15 |       |      | 0      | 138.54            |               |                | Rp 106,131.34 | Rp 106,131.34        |
| 21-Jul-15 |       |      | 0      | 138.54            |               |                | Rp 106,131.34 | Rp 106,131.34        |
| 22-Jul-15 |       |      | 0.46   | 138.08            |               |                | Rp 105,778.95 | Rp 105,778.95        |
| 23-Jul-15 |       |      | 0      | 138.08            |               |                | Rp 105,778.95 | Rp 105,778.95        |
| 24-Jul-15 |       |      | 3.58   | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 25-Jul-15 |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 26-Jul-15 |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 27-Jul-15 |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 28-Jul-15 |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 29-Jul-15 |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 30-Jul-15 |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 31-Jul-15 | 10.9  |      | 0      | 134.5             | Rp 131,774.28 |                | Rp 103,036.42 | Rp 234,810.70        |
| 1-Aug-15  |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 2-Aug-15  |       |      | 0      | 134.5             |               |                | Rp 103,036.42 | Rp 103,036.42        |
| 3-Aug-15  |       | 10.9 | 0      | 145.4             |               |                | Rp 111,386.58 | Rp 111,386.58        |
| 4-Aug-15  |       |      | 6.63   | 138.77            |               |                | Rp 106,307.53 | Rp 106,307.53        |
| 5-Aug-15  |       |      | 0      | 138.77            |               |                | Rp 106,307.53 | Rp 106,307.53        |
| 6-Aug-15  |       |      | 0      | 138.77            |               |                | Rp 106,307.53 | Rp 106,307.53        |
| 7-Aug-15  |       |      | 0      | 138.77            |               |                | Rp 106,307.53 | Rp 106,307.53        |
| 8-Aug-15  |       |      | 0      | 138.77            |               |                | Rp 106,307.53 | Rp 106,307.53        |
| 9-Aug-15  |       |      | 0.64   | 138.13            |               |                | Rp 105,817.25 | Rp 105,817.25        |
| 10-Aug-15 |       |      | 0      | 138.13            |               |                | Rp 105,817.25 | Rp 105,817.25        |
| 11-Aug-15 |       |      | 0      | 138.13            |               |                | Rp 105,817.25 | Rp 105,817.25        |
| 12-Aug-15 |       |      | 3.96   | 134.17            |               |                | Rp 102,783.61 | Rp 102,783.61        |
| 13-Aug-15 |       |      | 0      | 134.17            |               |                | Rp 102,783.61 | Rp 102,783.61        |
| 14-Aug-15 |       |      | 0      | 134.17            |               |                | Rp 102,783.61 | Rp 102,783.61        |
| 15-Aug-15 | 10.9  |      | 0.54   | 133.63            | Rp 131,774.28 |                | Rp 102,369.93 | Rp 234,144.21        |
| 16-Aug-15 |       |      | 0.68   | 132.95            |               |                | Rp 101,849.01 | Rp 101,849.01        |
| 17-Aug-15 |       | 10.9 | 0      | 143.85            |               |                | Rp 110,199.17 | Rp 110,199.17        |
| 18-Aug-15 |       |      | 0      | 143.85            |               |                | Rp 110,199.17 | Rp 110,199.17        |
| 19-Aug-15 |       |      | 0      | 143.85            |               |                | Rp 110,199.17 | Rp 110,199.17        |
| 20-Aug-15 |       |      | 9.41   | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 21-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 22-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 23-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 24-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 25-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 26-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 27-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 28-Aug-15 |       |      | 0      | 134.44            |               |                | Rp 102,990.45 | Rp 102,990.45        |
| 29-Aug-15 |       |      | 0.21   | 134.23            |               |                | Rp 102,829.58 | Rp 102,829.58        |
| 30-Aug-15 |       |      | 0      | 134.23            |               |                | Rp 102,829.58 | Rp 102,829.58        |
| 31-Aug-15 | 10.9  |      | 0      | 134.23            | Rp 131,774.28 |                | Rp 102,829.58 | Rp 234,603.86        |
| 1-Sep-15  |       |      | 0      | 134.23            |               |                | Rp 102,829.58 | Rp 102,829.58        |
| 2-Sep-15  |       |      | 0      | 134.23            |               |                | Rp 102,829.58 | Rp 102,829.58        |
| 3-Sep-15  |       | 10.9 | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 4-Sep-15  |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 5-Sep-15  |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 6-Sep-15  |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 7-Sep-15  |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 8-Sep-15  |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 9-Sep-15  |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 10-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 11-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 12-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 13-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 14-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 15-Sep-15 | 10.9  |      | 0      | 145.13            | Rp 131,774.28 |                | Rp 111,179.74 | Rp 242,954.02        |
| 16-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 17-Sep-15 |       |      | 0      | 145.13            |               |                | Rp 111,179.74 | Rp 111,179.74        |
| 18-Sep-15 |       | 10.9 | 0      | 156.03            |               |                | Rp 119,529.90 | Rp 119,529.90        |
| 19-Sep-15 |       |      | 0      | 156.03            |               |                | Rp 119,529.90 | Rp 119,529.90        |
| 20-Sep-15 |       |      | 0      | 156.03            |               |                | Rp 119,529.90 | Rp 119,529.90        |
| 21-Sep-15 |       |      | 0.37   | 155.66            |               |                | Rp 119,246.46 | Rp 119,246.46        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 22-Sep-15 |       |      | 0      | 155.66            |               |                | Rp 119,246.46 | Rp 119,246.46        |
| 23-Sep-15 |       |      | 0      | 155.66            |               |                | Rp 119,246.46 | Rp 119,246.46        |
| 24-Sep-15 |       |      | 7.58   | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 25-Sep-15 |       |      | 0      | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 26-Sep-15 |       |      | 0      | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 27-Sep-15 |       |      | 0      | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 28-Sep-15 |       |      | 0      | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 29-Sep-15 |       |      | 0      | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 30-Sep-15 | 10.9  |      | 0      | 148.08            | Rp 131,774.28 |                | Rp 113,439.65 | Rp 245,213.93        |
| 1-Oct-15  |       |      | 0      | 148.08            |               |                | Rp 113,439.65 | Rp 113,439.65        |
| 2-Oct-15  |       |      | 1.13   | 146.95            |               |                | Rp 112,573.99 | Rp 112,573.99        |
| 3-Oct-15  |       |      | 0      | 146.95            |               |                | Rp 112,573.99 | Rp 112,573.99        |
| 4-Oct-15  |       |      | 0      | 146.95            |               |                | Rp 112,573.99 | Rp 112,573.99        |
| 5-Oct-15  |       |      | 0      | 146.95            |               |                | Rp 112,573.99 | Rp 112,573.99        |
| 6-Oct-15  |       |      | 0      | 146.95            |               |                | Rp 112,573.99 | Rp 112,573.99        |
| 7-Oct-15  |       |      | 0      | 146.95            |               |                | Rp 112,573.99 | Rp 112,573.99        |
| 8-Oct-15  |       | 10.9 | 0      | 157.85            |               |                | Rp 120,924.15 | Rp 120,924.15        |
| 9-Oct-15  |       |      | 0      | 157.85            |               |                | Rp 120,924.15 | Rp 120,924.15        |
| 10-Oct-15 |       |      | 0      | 157.85            |               |                | Rp 120,924.15 | Rp 120,924.15        |
| 11-Oct-15 |       |      | 0      | 157.85            |               |                | Rp 120,924.15 | Rp 120,924.15        |
| 12-Oct-15 |       |      | 0      | 157.85            |               |                | Rp 120,924.15 | Rp 120,924.15        |
| 13-Oct-15 |       |      | 0      | 157.85            |               |                | Rp 120,924.15 | Rp 120,924.15        |
| 14-Oct-15 |       |      | 3.27   | 154.58            |               |                | Rp 118,419.10 | Rp 118,419.10        |
| 15-Oct-15 | 10.9  |      | 0      | 154.58            | Rp 131,774.28 |                | Rp 118,419.10 | Rp 250,193.38        |
| 16-Oct-15 |       |      | 0      | 154.58            |               |                | Rp 118,419.10 | Rp 118,419.10        |
| 17-Oct-15 |       | 10.9 | 0      | 165.48            |               |                | Rp 126,769.26 | Rp 126,769.26        |
| 18-Oct-15 |       |      | 9.93   | 155.55            |               |                | Rp 119,162.19 | Rp 119,162.19        |
| 19-Oct-15 |       |      | 0      | 155.55            |               |                | Rp 119,162.19 | Rp 119,162.19        |
| 20-Oct-15 |       |      | 0      | 155.55            |               |                | Rp 119,162.19 | Rp 119,162.19        |
| 21-Oct-15 |       |      | 0      | 155.55            |               |                | Rp 119,162.19 | Rp 119,162.19        |
| 22-Oct-15 |       |      | 0      | 155.55            |               |                | Rp 119,162.19 | Rp 119,162.19        |
| 23-Oct-15 |       |      | 0      | 155.55            |               |                | Rp 119,162.19 | Rp 119,162.19        |
| 24-Oct-15 |       |      | 0.39   | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 25-Oct-15 |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 26-Oct-15 |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 27-Oct-15 |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 28-Oct-15 |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 29-Oct-15 |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 30-Oct-15 |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 31-Oct-15 | 10.9  |      | 0      | 155.16            | Rp 131,774.28 |                | Rp 118,863.42 | Rp 250,637.70        |
| 1-Nov-15  |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 2-Nov-15  |       |      | 0      | 155.16            |               |                | Rp 118,863.42 | Rp 118,863.42        |
| 3-Nov-15  |       | 10.9 | 0      | 166.06            |               |                | Rp 127,213.58 | Rp 127,213.58        |
| 4-Nov-15  |       |      | 0      | 166.06            |               |                | Rp 127,213.58 | Rp 127,213.58        |
| 5-Nov-15  |       |      | 0      | 166.06            |               |                | Rp 127,213.58 | Rp 127,213.58        |
| 6-Nov-15  |       |      | 0      | 166.06            |               |                | Rp 127,213.58 | Rp 127,213.58        |
| 7-Nov-15  |       |      | 0      | 166.06            |               |                | Rp 127,213.58 | Rp 127,213.58        |
| 8-Nov-15  |       |      | 0      | 166.06            |               |                | Rp 127,213.58 | Rp 127,213.58        |
| 9-Nov-15  |       |      | 0.44   | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 10-Nov-15 |       |      | 0      | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 11-Nov-15 |       |      | 0      | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 12-Nov-15 |       |      | 0      | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 13-Nov-15 |       |      | 0      | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 14-Nov-15 |       |      | 0      | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 15-Nov-15 | 10.9  |      | 0      | 165.62            | Rp 131,774.28 |                | Rp 126,876.51 | Rp 258,650.79        |
| 16-Nov-15 |       |      | 0      | 165.62            |               |                | Rp 126,876.51 | Rp 126,876.51        |
| 17-Nov-15 |       | 10.9 | 0      | 176.52            |               |                | Rp 135,226.68 | Rp 135,226.68        |
| 18-Nov-15 |       |      | 0      | 176.52            |               |                | Rp 135,226.68 | Rp 135,226.68        |
| 19-Nov-15 |       |      | 0      | 176.52            |               |                | Rp 135,226.68 | Rp 135,226.68        |
| 20-Nov-15 |       |      | 0      | 176.52            |               |                | Rp 135,226.68 | Rp 135,226.68        |
| 21-Nov-15 |       |      | 0.94   | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 22-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 23-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 24-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 25-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 26-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 27-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 28-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 29-Nov-15 |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 30-Nov-15 | 10.9  |      | 0      | 175.58            | Rp 131,774.28 |                | Rp 134,506.57 | Rp 266,280.85        |
| 1-Dec-15  |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 2-Dec-15  |       |      | 0      | 175.58            |               |                | Rp 134,506.57 | Rp 134,506.57        |
| 3-Dec-15  |       | 10.9 | 0      | 186.48            |               |                | Rp 142,856.73 | Rp 142,856.73        |
| 4-Dec-15  |       |      | 0      | 186.48            |               |                | Rp 142,856.73 | Rp 142,856.73        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 5-Dec-15  |       |      | 0      | 186.48            |               |                | Rp 142,856.73 | Rp 142,856.73        |
| 6-Dec-15  |       |      | 0      | 186.48            |               |                | Rp 142,856.73 | Rp 142,856.73        |
| 7-Dec-15  |       |      | 0      | 186.48            |               |                | Rp 142,856.73 | Rp 142,856.73        |
| 8-Dec-15  |       |      | 5.03   | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 9-Dec-15  |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 10-Dec-15 |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 11-Dec-15 |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 12-Dec-15 |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 13-Dec-15 |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 14-Dec-15 |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 15-Dec-15 | 10.9  |      | 0      | 181.45            | Rp 131,774.28 |                | Rp 139,003.40 | Rp 270,777.68        |
| 16-Dec-15 |       |      | 0      | 181.45            |               |                | Rp 139,003.40 | Rp 139,003.40        |
| 17-Dec-15 |       | 10.9 | 0      | 192.35            |               |                | Rp 147,353.56 | Rp 147,353.56        |
| 18-Dec-15 |       |      | 1.09   | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 19-Dec-15 |       |      | 0      | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 20-Dec-15 |       |      | 0      | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 21-Dec-15 |       |      | 0      | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 22-Dec-15 |       |      | 0      | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 23-Dec-15 |       |      | 0      | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 24-Dec-15 |       |      | 0      | 191.26            |               |                | Rp 146,518.55 | Rp 146,518.55        |
| 25-Dec-15 |       |      | 0.02   | 191.24            |               |                | Rp 146,503.23 | Rp 146,503.23        |
| 26-Dec-15 |       |      | 0.64   | 190.6             |               |                | Rp 146,012.94 | Rp 146,012.94        |
| 27-Dec-15 |       |      | 0      | 190.6             |               |                | Rp 146,012.94 | Rp 146,012.94        |
| 28-Dec-15 |       |      | 2.58   | 188.02            |               |                | Rp 144,036.48 | Rp 144,036.48        |
| 29-Dec-15 |       |      | 0      | 188.02            |               |                | Rp 144,036.48 | Rp 144,036.48        |
| 30-Dec-15 |       |      | 0      | 188.02            |               |                | Rp 144,036.48 | Rp 144,036.48        |
| 31-Dec-15 |       |      | 0      | 188.02            |               |                | Rp 144,036.48 | Rp 144,036.48        |
|           |       |      |        |                   |               |                |               | Rp 37,075,418.88     |

## Replication 6

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 10-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 11-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 12-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 13-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 14-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 15-Jan-15 | 10.9  |      | 0      | 84.75             | Rp 131,774.28 |                | Rp 64,924.43 | Rp 196,698.71        |
| 16-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 17-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 18-Jan-15 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 19-Jan-15 |       | 10.9 | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 20-Jan-15 |       |      | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 21-Jan-15 |       |      | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 22-Jan-15 |       |      | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 23-Jan-15 |       |      | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 24-Jan-15 |       |      | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 25-Jan-15 |       |      | 0      | 95.65             |               |                | Rp 73,274.60 | Rp 73,274.60         |
| 26-Jan-15 |       |      | 2.6    | 93.05             |               |                | Rp 71,282.81 | Rp 71,282.81         |
| 27-Jan-15 |       |      | 0      | 93.05             |               |                | Rp 71,282.81 | Rp 71,282.81         |
| 28-Jan-15 |       |      | 0      | 93.05             |               |                | Rp 71,282.81 | Rp 71,282.81         |
| 29-Jan-15 |       |      | 0      | 93.05             |               |                | Rp 71,282.81 | Rp 71,282.81         |
| 30-Jan-15 |       |      | 10.95  | 82.1              |               |                | Rp 62,894.35 | Rp 62,894.35         |
| 31-Jan-15 | 10.9  |      | 0      | 82.1              | Rp 131,774.28 |                | Rp 62,894.35 | Rp 194,668.63        |
| 1-Feb-15  |       | 10.9 | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 2-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 3-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 4-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 5-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 6-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 7-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 8-Feb-15  |       |      | 0      | 93                |               |                | Rp 71,244.51 | Rp 71,244.51         |
| 9-Feb-15  |       |      | 0.03   | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 10-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 11-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 12-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 13-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 14-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 15-Feb-15 | 10.9  |      | 0      | 92.97             | Rp 131,774.28 |                | Rp 71,221.53 | Rp 202,995.81        |
| 16-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 17-Feb-15 |       |      | 0      | 92.97             |               |                | Rp 71,221.53 | Rp 71,221.53         |
| 18-Feb-15 |       | 10.9 | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 19-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 20-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 21-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 22-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 23-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 24-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 25-Feb-15 |       |      | 0      | 103.87            |               |                | Rp 79,571.69 | Rp 79,571.69         |
| 26-Feb-15 |       |      | 1.27   | 102.6             |               |                | Rp 78,598.78 | Rp 78,598.78         |
| 27-Feb-15 |       |      | 0      | 102.6             |               |                | Rp 78,598.78 | Rp 78,598.78         |
| 28-Feb-15 | 10.9  |      | 0      | 102.6             | Rp 131,774.28 |                | Rp 78,598.78 | Rp 210,373.06        |
| 1-Mar-15  |       | 10.9 | 0      | 113.5             |               |                | Rp 86,948.95 | Rp 86,948.95         |
| 2-Mar-15  |       |      | 0      | 113.5             |               |                | Rp 86,948.95 | Rp 86,948.95         |
| 3-Mar-15  |       |      | 0      | 113.5             |               |                | Rp 86,948.95 | Rp 86,948.95         |
| 4-Mar-15  |       |      | 8.42   | 105.08            |               |                | Rp 80,498.64 | Rp 80,498.64         |
| 5-Mar-15  |       |      | 0      | 105.08            |               |                | Rp 80,498.64 | Rp 80,498.64         |
| 6-Mar-15  |       |      | 0      | 105.08            |               |                | Rp 80,498.64 | Rp 80,498.64         |
| 7-Mar-15  |       |      | 7.92   | 97.16             |               |                | Rp 74,431.36 | Rp 74,431.36         |
| 8-Mar-15  |       |      | 0      | 97.16             |               |                | Rp 74,431.36 | Rp 74,431.36         |
| 9-Mar-15  |       |      | 0      | 97.16             |               |                | Rp 74,431.36 | Rp 74,431.36         |
| 10-Mar-15 |       |      | 0      | 97.16             |               |                | Rp 74,431.36 | Rp 74,431.36         |
| 11-Mar-15 |       |      | 0.36   | 96.8              |               |                | Rp 74,155.58 | Rp 74,155.58         |
| 12-Mar-15 |       |      | 0      | 96.8              |               |                | Rp 74,155.58 | Rp 74,155.58         |
| 13-Mar-15 |       |      | 0      | 96.8              |               |                | Rp 74,155.58 | Rp 74,155.58         |
| 14-Mar-15 |       |      | 0      | 96.8              |               |                | Rp 74,155.58 | Rp 74,155.58         |
| 15-Mar-15 | 10.9  |      | 0      | 96.8              | Rp 131,774.28 |                | Rp 74,155.58 | Rp 205,929.86        |
| 16-Mar-15 |       |      | 0      | 96.8              |               |                | Rp 74,155.58 | Rp 74,155.58         |
| 17-Mar-15 |       | 10.9 | 0      | 107.7             |               |                | Rp 82,505.74 | Rp 82,505.74         |
| 18-Mar-15 |       |      | 0      | 107.7             |               |                | Rp 82,505.74 | Rp 82,505.74         |
| 19-Mar-15 |       |      | 0      | 107.7             |               |                | Rp 82,505.74 | Rp 82,505.74         |
| 20-Mar-15 |       |      | 0      | 107.7             |               |                | Rp 82,505.74 | Rp 82,505.74         |
| 21-Mar-15 |       |      | 2.67   | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 22-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 23-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 24-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 25-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 26-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 27-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 28-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 29-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 30-Mar-15 |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 31-Mar-15 | 10.9  |      | 0      | 105.03            | Rp 131,774.28 |                | Rp 80,460.33 | Rp 212,234.61        |
| 1-Apr-15  |       |      | 0      | 105.03            |               |                | Rp 80,460.33 | Rp 80,460.33         |
| 2-Apr-15  |       | 10.9 | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 3-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 4-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 5-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 6-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 7-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 8-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 9-Apr-15  |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 10-Apr-15 |       |      | 0      | 115.93            |               |                | Rp 88,810.50 | Rp 88,810.50         |
| 11-Apr-15 |       |      | 1.09   | 114.84            |               |                | Rp 87,975.48 | Rp 87,975.48         |
| 12-Apr-15 |       |      | 0      | 114.84            |               |                | Rp 87,975.48 | Rp 87,975.48         |
| 13-Apr-15 |       |      | 0.13   | 114.71            |               |                | Rp 87,875.89 | Rp 87,875.89         |
| 14-Apr-15 |       |      | 0      | 114.71            |               |                | Rp 87,875.89 | Rp 87,875.89         |
| 15-Apr-15 | 10.9  |      | 0      | 114.71            | Rp 131,774.28 |                | Rp 87,875.89 | Rp 219,650.17        |
| 16-Apr-15 |       |      | 0      | 114.71            |               |                | Rp 87,875.89 | Rp 87,875.89         |
| 17-Apr-15 |       | 10.9 | 0      | 125.61            |               |                | Rp 96,226.05 | Rp 96,226.05         |
| 18-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05 | Rp 96,226.05         |
| 19-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05 | Rp 96,226.05         |
| 20-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05 | Rp 96,226.05         |
| 21-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05 | Rp 96,226.05         |
| 22-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05 | Rp 96,226.05         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 23-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 24-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 25-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 26-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 27-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 28-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 29-Apr-15 |       |      | 0      | 125.61            |               |                | Rp 96,226.05  | Rp 96,226.05         |
| 30-Apr-15 | 10.9  |      | 0      | 125.61            | Rp 131,774.28 |                | Rp 96,226.05  | Rp 228,000.33        |
| 1-May-15  |       |      | 1.07   | 124.54            |               |                | Rp 95,406.36  | Rp 95,406.36         |
| 2-May-15  |       |      | 0      | 124.54            |               |                | Rp 95,406.36  | Rp 95,406.36         |
| 3-May-15  |       | 10.9 | 0      | 135.44            |               |                | Rp 103,756.52 | Rp 103,756.52        |
| 4-May-15  |       |      | 1.77   | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 5-May-15  |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 6-May-15  |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 7-May-15  |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 8-May-15  |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 9-May-15  |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 10-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 11-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 12-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 13-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 14-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 15-May-15 | 10.9  |      | 0      | 133.67            | Rp 131,774.28 |                | Rp 102,400.58 | Rp 234,174.86        |
| 16-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 17-May-15 |       |      | 0      | 133.67            |               |                | Rp 102,400.58 | Rp 102,400.58        |
| 18-May-15 |       | 10.9 | 0      | 144.57            |               |                | Rp 110,750.74 | Rp 110,750.74        |
| 19-May-15 |       |      | 0      | 144.57            |               |                | Rp 110,750.74 | Rp 110,750.74        |
| 20-May-15 |       |      | 0      | 144.57            |               |                | Rp 110,750.74 | Rp 110,750.74        |
| 21-May-15 |       |      | 0      | 144.57            |               |                | Rp 110,750.74 | Rp 110,750.74        |
| 22-May-15 |       |      | 1.6    | 142.97            |               |                | Rp 109,525.03 | Rp 109,525.03        |
| 23-May-15 |       |      | 0      | 142.97            |               |                | Rp 109,525.03 | Rp 109,525.03        |
| 24-May-15 |       |      | 0      | 142.97            |               |                | Rp 109,525.03 | Rp 109,525.03        |
| 25-May-15 |       |      | 0      | 142.97            |               |                | Rp 109,525.03 | Rp 109,525.03        |
| 26-May-15 |       |      | 0      | 142.97            |               |                | Rp 109,525.03 | Rp 109,525.03        |
| 27-May-15 |       |      | 3.34   | 139.63            |               |                | Rp 106,966.35 | Rp 106,966.35        |
| 28-May-15 |       |      | 0      | 139.63            |               |                | Rp 106,966.35 | Rp 106,966.35        |
| 29-May-15 |       |      | 0.97   | 138.66            |               |                | Rp 106,223.27 | Rp 106,223.27        |
| 30-May-15 |       |      | 0      | 138.66            |               |                | Rp 106,223.27 | Rp 106,223.27        |
| 31-May-15 | 10.9  |      | 1.77   | 136.89            | Rp 131,774.28 |                | Rp 104,867.32 | Rp 236,641.60        |
| 1-Jun-15  |       | 10.9 | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 2-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 3-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 4-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 5-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 6-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 7-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 8-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 9-Jun-15  |       |      | 0      | 147.79            |               |                | Rp 113,217.49 | Rp 113,217.49        |
| 10-Jun-15 |       |      | 0.9    | 146.89            |               |                | Rp 112,528.02 | Rp 112,528.02        |
| 11-Jun-15 |       |      | 0      | 146.89            |               |                | Rp 112,528.02 | Rp 112,528.02        |
| 12-Jun-15 |       |      | 0      | 146.89            |               |                | Rp 112,528.02 | Rp 112,528.02        |
| 13-Jun-15 |       |      | 1.17   | 145.72            |               |                | Rp 111,631.72 | Rp 111,631.72        |
| 14-Jun-15 |       |      | 0      | 145.72            |               |                | Rp 111,631.72 | Rp 111,631.72        |
| 15-Jun-15 | 10.9  |      | 0      | 145.72            | Rp 131,774.28 |                | Rp 111,631.72 | Rp 243,406.00        |
| 16-Jun-15 |       |      | 0      | 145.72            |               |                | Rp 111,631.72 | Rp 111,631.72        |
| 17-Jun-15 |       | 10.9 | 18.9   | 137.72            |               |                | Rp 105,503.16 | Rp 105,503.16        |
| 18-Jun-15 |       |      | 2.05   | 135.67            |               |                | Rp 103,932.72 | Rp 103,932.72        |
| 19-Jun-15 |       |      | 0      | 135.67            |               |                | Rp 103,932.72 | Rp 103,932.72        |
| 20-Jun-15 |       |      | 19.77  | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 21-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 22-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 23-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 24-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 25-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 26-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 27-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 28-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 29-Jun-15 |       |      | 0      | 115.9             |               |                | Rp 88,787.51  | Rp 88,787.51         |
| 30-Jun-15 | 10.9  |      | 17.67  | 98.23             | Rp 131,774.28 |                | Rp 75,251.06  | Rp 207,025.34        |
| 1-Jul-15  |       |      | 0      | 98.23             |               |                | Rp 75,251.06  | Rp 75,251.06         |
| 2-Jul-15  |       | 10.9 | 0      | 109.13            |               |                | Rp 83,601.22  | Rp 83,601.22         |
| 3-Jul-15  |       |      | 0      | 109.13            |               |                | Rp 83,601.22  | Rp 83,601.22         |
| 4-Jul-15  |       |      | 2.82   | 106.31            |               |                | Rp 81,440.90  | Rp 81,440.90         |
| 5-Jul-15  |       |      | 0      | 106.31            |               |                | Rp 81,440.90  | Rp 81,440.90         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 6-Jul-15  |       |      | 0      | 106.31            |               |                | Rp 81,440.90  | Rp 81,440.90         |
| 7-Jul-15  |       |      | 0      | 106.31            |               |                | Rp 81,440.90  | Rp 81,440.90         |
| 8-Jul-15  |       |      | 0      | 106.31            |               |                | Rp 81,440.90  | Rp 81,440.90         |
| 9-Jul-15  |       |      | 0      | 106.31            |               |                | Rp 81,440.90  | Rp 81,440.90         |
| 10-Jul-15 |       |      | 0.46   | 105.85            |               |                | Rp 81,088.51  | Rp 81,088.51         |
| 11-Jul-15 |       |      | 0      | 105.85            |               |                | Rp 81,088.51  | Rp 81,088.51         |
| 12-Jul-15 |       |      | 0      | 105.85            |               |                | Rp 81,088.51  | Rp 81,088.51         |
| 13-Jul-15 |       |      | 0.41   | 105.44            |               |                | Rp 80,774.42  | Rp 80,774.42         |
| 14-Jul-15 |       |      | 0      | 105.44            |               |                | Rp 80,774.42  | Rp 80,774.42         |
| 15-Jul-15 | 10.9  |      | 0      | 105.44            | Rp 131,774.28 |                | Rp 80,774.42  | Rp 212,548.70        |
| 16-Jul-15 |       |      | 0      | 105.44            |               |                | Rp 80,774.42  | Rp 80,774.42         |
| 17-Jul-15 |       |      | 0      | 105.44            |               |                | Rp 80,774.42  | Rp 80,774.42         |
| 18-Jul-15 |       |      | 3.59   | 101.85            |               |                | Rp 78,024.23  | Rp 78,024.23         |
| 19-Jul-15 |       | 10.9 | 0      | 112.75            |               |                | Rp 86,374.39  | Rp 86,374.39         |
| 20-Jul-15 |       |      | 0      | 112.75            |               |                | Rp 86,374.39  | Rp 86,374.39         |
| 21-Jul-15 |       |      | 0      | 112.75            |               |                | Rp 86,374.39  | Rp 86,374.39         |
| 22-Jul-15 |       |      | 0.03   | 112.72            |               |                | Rp 86,351.41  | Rp 86,351.41         |
| 23-Jul-15 |       |      | 0      | 112.72            |               |                | Rp 86,351.41  | Rp 86,351.41         |
| 24-Jul-15 |       |      | 3.99   | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 25-Jul-15 |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 26-Jul-15 |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 27-Jul-15 |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 28-Jul-15 |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 29-Jul-15 |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 30-Jul-15 |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 31-Jul-15 | 10.9  |      | 0      | 108.73            | Rp 131,774.28 |                | Rp 83,294.79  | Rp 215,069.07        |
| 1-Aug-15  |       |      | 0      | 108.73            |               |                | Rp 83,294.79  | Rp 83,294.79         |
| 2-Aug-15  |       | 10.9 | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 3-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 4-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 5-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 6-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 7-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 8-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 9-Aug-15  |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 10-Aug-15 |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 11-Aug-15 |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 12-Aug-15 |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 13-Aug-15 |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 14-Aug-15 |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 15-Aug-15 | 10.9  |      | 0      | 119.63            | Rp 131,774.28 |                | Rp 91,644.95  | Rp 223,419.23        |
| 16-Aug-15 |       |      | 0      | 119.63            |               |                | Rp 91,644.95  | Rp 91,644.95         |
| 17-Aug-15 |       | 10.9 | 0      | 130.53            |               |                | Rp 99,995.12  | Rp 99,995.12         |
| 18-Aug-15 |       |      | 6.58   | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 19-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 20-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 21-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 22-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 23-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 24-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 25-Aug-15 |       |      | 0      | 123.95            |               |                | Rp 94,954.38  | Rp 94,954.38         |
| 26-Aug-15 |       |      | 1.3    | 122.65            |               |                | Rp 93,958.49  | Rp 93,958.49         |
| 27-Aug-15 |       |      | 0      | 122.65            |               |                | Rp 93,958.49  | Rp 93,958.49         |
| 28-Aug-15 |       |      | 0      | 122.65            |               |                | Rp 93,958.49  | Rp 93,958.49         |
| 29-Aug-15 |       |      | 0      | 122.65            |               |                | Rp 93,958.49  | Rp 93,958.49         |
| 30-Aug-15 |       |      | 0      | 122.65            |               |                | Rp 93,958.49  | Rp 93,958.49         |
| 31-Aug-15 | 10.9  |      | 0      | 122.65            | Rp 131,774.28 |                | Rp 93,958.49  | Rp 225,732.77        |
| 1-Sep-15  |       | 10.9 | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 2-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 3-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 4-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 5-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 6-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 7-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 8-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 9-Sep-15  |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 10-Sep-15 |       |      | 0      | 133.55            |               |                | Rp 102,308.65 | Rp 102,308.65        |
| 11-Sep-15 |       |      | 1.94   | 131.61            |               |                | Rp 100,822.47 | Rp 100,822.47        |
| 12-Sep-15 |       |      | 0      | 131.61            |               |                | Rp 100,822.47 | Rp 100,822.47        |
| 13-Sep-15 |       |      | 0      | 131.61            |               |                | Rp 100,822.47 | Rp 100,822.47        |
| 14-Sep-15 |       |      | 0      | 131.61            |               |                | Rp 100,822.47 | Rp 100,822.47        |
| 15-Sep-15 | 10.9  |      | 0      | 131.61            | Rp 131,774.28 |                | Rp 100,822.47 | Rp 232,596.75        |
| 16-Sep-15 |       | 10.9 | 0      | 142.51            |               |                | Rp 109,172.64 | Rp 109,172.64        |
| 17-Sep-15 |       |      | 3.83   | 138.68            |               |                | Rp 106,238.59 | Rp 106,238.59        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 18-Sep-15 |       |      | 0      | 138.68            |               |                | Rp 106,238.59 | Rp 106,238.59        |
| 19-Sep-15 |       |      | 0      | 138.68            |               |                | Rp 106,238.59 | Rp 106,238.59        |
| 20-Sep-15 |       |      | 0      | 138.68            |               |                | Rp 106,238.59 | Rp 106,238.59        |
| 21-Sep-15 |       |      | 2.2    | 136.48            |               |                | Rp 104,553.23 | Rp 104,553.23        |
| 22-Sep-15 |       |      | 0      | 136.48            |               |                | Rp 104,553.23 | Rp 104,553.23        |
| 23-Sep-15 |       |      | 0      | 136.48            |               |                | Rp 104,553.23 | Rp 104,553.23        |
| 24-Sep-15 |       |      | 0      | 136.48            |               |                | Rp 104,553.23 | Rp 104,553.23        |
| 25-Sep-15 |       |      | 1.53   | 134.95            |               |                | Rp 103,381.15 | Rp 103,381.15        |
| 26-Sep-15 |       |      | 0      | 134.95            |               |                | Rp 103,381.15 | Rp 103,381.15        |
| 27-Sep-15 |       |      | 0      | 134.95            |               |                | Rp 103,381.15 | Rp 103,381.15        |
| 28-Sep-15 |       |      | 0      | 134.95            |               |                | Rp 103,381.15 | Rp 103,381.15        |
| 29-Sep-15 |       |      | 0      | 134.95            |               |                | Rp 103,381.15 | Rp 103,381.15        |
| 30-Sep-15 | 10.9  |      | 1.55   | 133.4             | Rp 131,774.28 |                | Rp 102,193.74 | Rp 233,968.02        |
| 1-Oct-15  |       |      | 0      | 133.4             |               |                | Rp 102,193.74 | Rp 102,193.74        |
| 2-Oct-15  |       |      | 0      | 133.4             |               |                | Rp 102,193.74 | Rp 102,193.74        |
| 3-Oct-15  |       |      | 0      | 133.4             |               |                | Rp 102,193.74 | Rp 102,193.74        |
| 4-Oct-15  |       |      | 0      | 133.4             |               |                | Rp 102,193.74 | Rp 102,193.74        |
| 5-Oct-15  |       |      | 0      | 133.4             |               |                | Rp 102,193.74 | Rp 102,193.74        |
| 6-Oct-15  |       | 10.9 | 0      | 144.3             |               |                | Rp 110,543.90 | Rp 110,543.90        |
| 7-Oct-15  |       |      | 0      | 144.3             |               |                | Rp 110,543.90 | Rp 110,543.90        |
| 8-Oct-15  |       |      | 0      | 144.3             |               |                | Rp 110,543.90 | Rp 110,543.90        |
| 9-Oct-15  |       |      | 3.62   | 140.68            |               |                | Rp 107,770.73 | Rp 107,770.73        |
| 10-Oct-15 |       |      | 0      | 140.68            |               |                | Rp 107,770.73 | Rp 107,770.73        |
| 11-Oct-15 |       |      | 0      | 140.68            |               |                | Rp 107,770.73 | Rp 107,770.73        |
| 12-Oct-15 |       |      | 0      | 140.68            |               |                | Rp 107,770.73 | Rp 107,770.73        |
| 13-Oct-15 |       |      | 1.95   | 138.73            |               |                | Rp 106,276.89 | Rp 106,276.89        |
| 14-Oct-15 |       |      | 0      | 138.73            |               |                | Rp 106,276.89 | Rp 106,276.89        |
| 15-Oct-15 | 10.9  |      | 0      | 138.73            | Rp 131,774.28 |                | Rp 106,276.89 | Rp 238,051.17        |
| 16-Oct-15 |       |      | 0      | 138.73            |               |                | Rp 106,276.89 | Rp 106,276.89        |
| 17-Oct-15 |       |      | 0      | 138.73            |               |                | Rp 106,276.89 | Rp 106,276.89        |
| 18-Oct-15 |       | 10.9 | 0      | 149.63            |               |                | Rp 114,627.05 | Rp 114,627.05        |
| 19-Oct-15 |       |      | 3.59   | 146.04            |               |                | Rp 111,876.86 | Rp 111,876.86        |
| 20-Oct-15 |       |      | 0      | 146.04            |               |                | Rp 111,876.86 | Rp 111,876.86        |
| 21-Oct-15 |       |      | 2.92   | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 22-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 23-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 24-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 25-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 26-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 27-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 28-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 29-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 30-Oct-15 |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 31-Oct-15 | 10.9  |      | 0      | 143.12            | Rp 131,774.28 |                | Rp 109,639.94 | Rp 241,414.22        |
| 1-Nov-15  |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 2-Nov-15  |       |      | 0      | 143.12            |               |                | Rp 109,639.94 | Rp 109,639.94        |
| 3-Nov-15  |       | 10.9 | 0      | 154.02            |               |                | Rp 117,990.10 | Rp 117,990.10        |
| 4-Nov-15  |       |      | 0      | 154.02            |               |                | Rp 117,990.10 | Rp 117,990.10        |
| 5-Nov-15  |       |      | 0      | 154.02            |               |                | Rp 117,990.10 | Rp 117,990.10        |
| 6-Nov-15  |       |      | 0      | 154.02            |               |                | Rp 117,990.10 | Rp 117,990.10        |
| 7-Nov-15  |       |      | 0      | 154.02            |               |                | Rp 117,990.10 | Rp 117,990.10        |
| 8-Nov-15  |       |      | 0.38   | 153.64            |               |                | Rp 117,698.99 | Rp 117,698.99        |
| 9-Nov-15  |       |      | 0      | 153.64            |               |                | Rp 117,698.99 | Rp 117,698.99        |
| 10-Nov-15 |       |      | 0      | 153.64            |               |                | Rp 117,698.99 | Rp 117,698.99        |
| 11-Nov-15 |       |      | 0      | 153.64            |               |                | Rp 117,698.99 | Rp 117,698.99        |
| 12-Nov-15 |       |      | 0      | 153.64            |               |                | Rp 117,698.99 | Rp 117,698.99        |
| 13-Nov-15 |       |      | 0      | 153.64            |               |                | Rp 117,698.99 | Rp 117,698.99        |
| 14-Nov-15 |       |      | 8.56   | 145.08            |               |                | Rp 111,141.44 | Rp 111,141.44        |
| 15-Nov-15 | 10.9  |      | 0      | 145.08            | Rp 131,774.28 |                | Rp 111,141.44 | Rp 242,915.72        |
| 16-Nov-15 |       |      | 0      | 145.08            |               |                | Rp 111,141.44 | Rp 111,141.44        |
| 17-Nov-15 |       |      | 0      | 145.08            |               |                | Rp 111,141.44 | Rp 111,141.44        |
| 18-Nov-15 |       | 10.9 | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 19-Nov-15 |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 20-Nov-15 |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 21-Nov-15 |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 22-Nov-15 |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 23-Nov-15 |       |      | 1.11   | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 24-Nov-15 |       |      | 0      | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 25-Nov-15 |       |      | 0      | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 26-Nov-15 |       |      | 0      | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 27-Nov-15 |       |      | 0      | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 28-Nov-15 |       |      | 0      | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 29-Nov-15 |       |      | 0      | 154.87            |               |                | Rp 118,641.26 | Rp 118,641.26        |
| 30-Nov-15 | 10.9  |      | 0.8    | 154.07            | Rp 131,774.28 |                | Rp 118,028.40 | Rp 249,802.68        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 1-Dec-15  |       | 10.9 | 4.35   | 160.62            |               |                | Rp 123,046.16 | Rp 123,046.16        |
| 2-Dec-15  |       |      | 0      | 160.62            |               |                | Rp 123,046.16 | Rp 123,046.16        |
| 3-Dec-15  |       |      | 0      | 160.62            |               |                | Rp 123,046.16 | Rp 123,046.16        |
| 4-Dec-15  |       |      | 0      | 160.62            |               |                | Rp 123,046.16 | Rp 123,046.16        |
| 5-Dec-15  |       |      | 0      | 160.62            |               |                | Rp 123,046.16 | Rp 123,046.16        |
| 6-Dec-15  |       |      | 4.64   | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 7-Dec-15  |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 8-Dec-15  |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 9-Dec-15  |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 10-Dec-15 |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 11-Dec-15 |       |      | 0      | 155.98            |               |                | Rp 119,491.60 | Rp 119,491.60        |
| 12-Dec-15 |       |      | 9.66   | 146.32            |               |                | Rp 112,091.36 | Rp 112,091.36        |
| 13-Dec-15 |       |      | 0      | 146.32            |               |                | Rp 112,091.36 | Rp 112,091.36        |
| 14-Dec-15 |       |      | 0      | 146.32            |               |                | Rp 112,091.36 | Rp 112,091.36        |
| 15-Dec-15 | 10.9  |      | 0      | 146.32            | Rp 131,774.28 |                | Rp 112,091.36 | Rp 243,865.64        |
| 16-Dec-15 |       |      | 0      | 146.32            |               |                | Rp 112,091.36 | Rp 112,091.36        |
| 17-Dec-15 |       | 10.9 | 0      | 157.22            |               |                | Rp 120,441.53 | Rp 120,441.53        |
| 18-Dec-15 |       |      | 0      | 157.22            |               |                | Rp 120,441.53 | Rp 120,441.53        |
| 19-Dec-15 |       |      | 0      | 157.22            |               |                | Rp 120,441.53 | Rp 120,441.53        |
| 20-Dec-15 |       |      | 1.9    | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 21-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 22-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 23-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 24-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 25-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 26-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 27-Dec-15 |       |      | 0      | 155.32            |               |                | Rp 118,985.99 | Rp 118,985.99        |
| 28-Dec-15 |       |      | 9.97   | 145.35            |               |                | Rp 111,348.27 | Rp 111,348.27        |
| 29-Dec-15 |       |      | 0      | 145.35            |               |                | Rp 111,348.27 | Rp 111,348.27        |
| 30-Dec-15 |       |      | 0      | 145.35            |               |                | Rp 111,348.27 | Rp 111,348.27        |
| 31-Dec-15 |       |      | 0      | 145.35            |               |                | Rp 111,348.27 | Rp 111,348.27        |
|           |       |      |        |                   |               |                | Rp            | 37,856,741.34        |

## Replication 7

| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |      | 0      | 84.75             |               |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |      | 0.03   | 84.72             |               |                | Rp 64,901.45 | Rp 64,901.45         |
| 9-Jan-15  |       |      | 0      | 84.72             |               |                | Rp 64,901.45 | Rp 64,901.45         |
| 10-Jan-15 |       |      | 0      | 84.72             |               |                | Rp 64,901.45 | Rp 64,901.45         |
| 11-Jan-15 |       |      | 0      | 84.72             |               |                | Rp 64,901.45 | Rp 64,901.45         |
| 12-Jan-15 |       |      | 0      | 84.72             |               |                | Rp 64,901.45 | Rp 64,901.45         |
| 13-Jan-15 |       |      | 0      | 84.72             |               |                | Rp 64,901.45 | Rp 64,901.45         |
| 14-Jan-15 |       |      | 1.71   | 83.01             |               |                | Rp 63,591.47 | Rp 63,591.47         |
| 15-Jan-15 | 10.9  |      | 0      | 83.01             | Rp 131,774.28 |                | Rp 63,591.47 | Rp 195,365.75        |
| 16-Jan-15 |       |      | 0      | 83.01             |               |                | Rp 63,591.47 | Rp 63,591.47         |
| 17-Jan-15 |       |      | 0      | 83.01             |               |                | Rp 63,591.47 | Rp 63,591.47         |
| 18-Jan-15 |       |      | 0.12   | 82.89             |               |                | Rp 63,499.54 | Rp 63,499.54         |
| 19-Jan-15 |       |      | 0      | 82.89             |               |                | Rp 63,499.54 | Rp 63,499.54         |
| 20-Jan-15 |       |      | 0      | 82.89             |               |                | Rp 63,499.54 | Rp 63,499.54         |
| 21-Jan-15 |       | 10.9 | 0      | 93.79             |               |                | Rp 71,849.71 | Rp 71,849.71         |
| 22-Jan-15 |       |      | 0      | 93.79             |               |                | Rp 71,849.71 | Rp 71,849.71         |
| 23-Jan-15 |       |      | 0.6    | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 24-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 25-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 26-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 27-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 28-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 29-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 30-Jan-15 |       |      | 0      | 93.19             |               |                | Rp 71,390.06 | Rp 71,390.06         |
| 31-Jan-15 | 10.9  |      | 0.89   | 92.3              | Rp 131,774.28 |                | Rp 70,708.26 | Rp 202,482.54        |
| 1-Feb-15  |       |      | 0      | 92.3              |               |                | Rp 70,708.26 | Rp 70,708.26         |
| 2-Feb-15  |       | 10.9 | 0.18   | 103.02            |               |                | Rp 78,920.53 | Rp 78,920.53         |
| 3-Feb-15  |       |      | 0      | 103.02            |               |                | Rp 78,920.53 | Rp 78,920.53         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 4-Feb-15  |       |      | 0      | 103.02            |               |                | Rp 78,920.53 | Rp 78,920.53         |
| 5-Feb-15  |       |      | 0      | 103.02            |               |                | Rp 78,920.53 | Rp 78,920.53         |
| 6-Feb-15  |       |      | 0      | 103.02            |               |                | Rp 78,920.53 | Rp 78,920.53         |
| 7-Feb-15  |       |      | 0      | 103.02            |               |                | Rp 78,920.53 | Rp 78,920.53         |
| 8-Feb-15  |       |      | 18.85  | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 9-Feb-15  |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 10-Feb-15 |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 11-Feb-15 |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 12-Feb-15 |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 13-Feb-15 |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 14-Feb-15 |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 15-Feb-15 | 10.9  |      | 0      | 84.17             | Rp 131,774.28 |                | Rp 64,480.11 | Rp 196,254.39        |
| 16-Feb-15 |       |      | 0      | 84.17             |               |                | Rp 64,480.11 | Rp 64,480.11         |
| 17-Feb-15 |       | 10.9 | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 18-Feb-15 |       |      | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 19-Feb-15 |       |      | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 20-Feb-15 |       |      | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 21-Feb-15 |       |      | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 22-Feb-15 |       |      | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 23-Feb-15 |       |      | 0      | 95.07             |               |                | Rp 72,830.27 | Rp 72,830.27         |
| 24-Feb-15 |       |      | 0.77   | 94.3              |               |                | Rp 72,240.40 | Rp 72,240.40         |
| 25-Feb-15 |       |      | 0      | 94.3              |               |                | Rp 72,240.40 | Rp 72,240.40         |
| 26-Feb-15 |       |      | 0      | 94.3              |               |                | Rp 72,240.40 | Rp 72,240.40         |
| 27-Feb-15 |       |      | 0      | 94.3              |               |                | Rp 72,240.40 | Rp 72,240.40         |
| 28-Feb-15 | 10.9  |      | 0      | 94.3              | Rp 131,774.28 |                | Rp 72,240.40 | Rp 204,014.68        |
| 1-Mar-15  |       | 10.9 | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 2-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 3-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 4-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 5-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 6-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 7-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 8-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 9-Mar-15  |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 10-Mar-15 |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 11-Mar-15 |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 12-Mar-15 |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 13-Mar-15 |       |      | 0      | 105.2             |               |                | Rp 80,590.56 | Rp 80,590.56         |
| 14-Mar-15 |       |      | 1.31   | 103.89            |               |                | Rp 79,587.01 | Rp 79,587.01         |
| 15-Mar-15 | 10.9  |      | 0      | 103.89            | Rp 131,774.28 |                | Rp 79,587.01 | Rp 211,361.29        |
| 16-Mar-15 |       |      | 0      | 103.89            |               |                | Rp 79,587.01 | Rp 79,587.01         |
| 17-Mar-15 |       | 10.9 | 0      | 114.79            |               |                | Rp 87,937.18 | Rp 87,937.18         |
| 18-Mar-15 |       |      | 0      | 114.79            |               |                | Rp 87,937.18 | Rp 87,937.18         |
| 19-Mar-15 |       |      | 0      | 114.79            |               |                | Rp 87,937.18 | Rp 87,937.18         |
| 20-Mar-15 |       |      | 0      | 114.79            |               |                | Rp 87,937.18 | Rp 87,937.18         |
| 21-Mar-15 |       |      | 0.69   | 114.1             |               |                | Rp 87,408.59 | Rp 87,408.59         |
| 22-Mar-15 |       |      | 0      | 114.1             |               |                | Rp 87,408.59 | Rp 87,408.59         |
| 23-Mar-15 |       |      | 0      | 114.1             |               |                | Rp 87,408.59 | Rp 87,408.59         |
| 24-Mar-15 |       |      | 0.87   | 113.23            |               |                | Rp 86,742.11 | Rp 86,742.11         |
| 25-Mar-15 |       |      | 0      | 113.23            |               |                | Rp 86,742.11 | Rp 86,742.11         |
| 26-Mar-15 |       |      | 0.08   | 113.15            |               |                | Rp 86,680.82 | Rp 86,680.82         |
| 27-Mar-15 |       |      | 0      | 113.15            |               |                | Rp 86,680.82 | Rp 86,680.82         |
| 28-Mar-15 |       |      | 0      | 113.15            |               |                | Rp 86,680.82 | Rp 86,680.82         |
| 29-Mar-15 |       |      | 0      | 113.15            |               |                | Rp 86,680.82 | Rp 86,680.82         |
| 30-Mar-15 |       |      | 0      | 113.15            |               |                | Rp 86,680.82 | Rp 86,680.82         |
| 31-Mar-15 | 10.9  |      | 0      | 113.15            | Rp 131,774.28 |                | Rp 86,680.82 | Rp 218,455.10        |
| 1-Apr-15  |       |      | 0      | 113.15            |               |                | Rp 86,680.82 | Rp 86,680.82         |
| 2-Apr-15  |       | 10.9 | 0.75   | 123.3             |               |                | Rp 94,456.43 | Rp 94,456.43         |
| 3-Apr-15  |       |      | 1.88   | 121.42            |               |                | Rp 93,016.22 | Rp 93,016.22         |
| 4-Apr-15  |       |      | 0      | 121.42            |               |                | Rp 93,016.22 | Rp 93,016.22         |
| 5-Apr-15  |       |      | 0      | 121.42            |               |                | Rp 93,016.22 | Rp 93,016.22         |
| 6-Apr-15  |       |      | 2.48   | 118.94            |               |                | Rp 91,116.37 | Rp 91,116.37         |
| 7-Apr-15  |       |      | 0      | 118.94            |               |                | Rp 91,116.37 | Rp 91,116.37         |
| 8-Apr-15  |       |      | 0      | 118.94            |               |                | Rp 91,116.37 | Rp 91,116.37         |
| 9-Apr-15  |       |      | 0      | 118.94            |               |                | Rp 91,116.37 | Rp 91,116.37         |
| 10-Apr-15 |       |      | 0      | 118.94            |               |                | Rp 91,116.37 | Rp 91,116.37         |
| 11-Apr-15 |       |      | 19.99  | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |
| 12-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |
| 13-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |
| 14-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |
| 15-Apr-15 | 10.9  |      | 0      | 98.95             | Rp 131,774.28 |                | Rp 75,802.63 | Rp 207,576.91        |
| 16-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |
| 17-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |
| 18-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63 | Rp 75,802.63         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 19-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63  | Rp 75,802.63         |
| 20-Apr-15 |       |      | 0      | 98.95             |               |                | Rp 75,802.63  | Rp 75,802.63         |
| 21-Apr-15 |       | 10.9 | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 22-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 23-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 24-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 25-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 26-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 27-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 28-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 29-Apr-15 |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 30-Apr-15 | 10.9  |      | 0      | 109.85            | Rp 131,774.28 |                | Rp 84,152.79  | Rp 215,927.07        |
| 1-May-15  |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 2-May-15  |       |      | 0      | 109.85            |               |                | Rp 84,152.79  | Rp 84,152.79         |
| 3-May-15  |       | 10.9 | 0      | 120.75            |               |                | Rp 92,502.95  | Rp 92,502.95         |
| 4-May-15  |       |      | 0      | 120.75            |               |                | Rp 92,502.95  | Rp 92,502.95         |
| 5-May-15  |       |      | 0      | 120.75            |               |                | Rp 92,502.95  | Rp 92,502.95         |
| 6-May-15  |       |      | 0      | 120.75            |               |                | Rp 92,502.95  | Rp 92,502.95         |
| 7-May-15  |       |      | 0.83   | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 8-May-15  |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 9-May-15  |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 10-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 11-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 12-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 13-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 14-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 15-May-15 | 10.9  |      | 0      | 119.92            | Rp 131,774.28 |                | Rp 91,867.11  | Rp 223,641.39        |
| 16-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 17-May-15 |       |      | 0      | 119.92            |               |                | Rp 91,867.11  | Rp 91,867.11         |
| 18-May-15 |       | 10.9 | 1.23   | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 19-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 20-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 21-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 22-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 23-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 24-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 25-May-15 |       |      | 0      | 129.59            |               |                | Rp 99,275.01  | Rp 99,275.01         |
| 26-May-15 |       |      | 1.05   | 128.54            |               |                | Rp 98,470.64  | Rp 98,470.64         |
| 27-May-15 |       |      | 0      | 128.54            |               |                | Rp 98,470.64  | Rp 98,470.64         |
| 28-May-15 |       |      | 0      | 128.54            |               |                | Rp 98,470.64  | Rp 98,470.64         |
| 29-May-15 |       |      | 0.45   | 128.09            |               |                | Rp 98,125.91  | Rp 98,125.91         |
| 30-May-15 |       |      | 0      | 128.09            |               |                | Rp 98,125.91  | Rp 98,125.91         |
| 31-May-15 | 10.9  |      | 0      | 128.09            | Rp 131,774.28 |                | Rp 98,125.91  | Rp 229,900.19        |
| 1-Jun-15  |       |      | 0      | 128.09            |               |                | Rp 98,125.91  | Rp 98,125.91         |
| 2-Jun-15  |       |      | 0      | 128.09            |               |                | Rp 98,125.91  | Rp 98,125.91         |
| 3-Jun-15  |       | 10.9 | 3.44   | 135.55            |               |                | Rp 103,840.79 | Rp 103,840.79        |
| 4-Jun-15  |       |      | 0      | 135.55            |               |                | Rp 103,840.79 | Rp 103,840.79        |
| 5-Jun-15  |       |      | 3.11   | 132.44            |               |                | Rp 101,458.31 | Rp 101,458.31        |
| 6-Jun-15  |       |      | 0      | 132.44            |               |                | Rp 101,458.31 | Rp 101,458.31        |
| 7-Jun-15  |       |      | 0      | 132.44            |               |                | Rp 101,458.31 | Rp 101,458.31        |
| 8-Jun-15  |       |      | 0.84   | 131.6             |               |                | Rp 100,814.81 | Rp 100,814.81        |
| 9-Jun-15  |       |      | 0      | 131.6             |               |                | Rp 100,814.81 | Rp 100,814.81        |
| 10-Jun-15 |       |      | 0      | 131.6             |               |                | Rp 100,814.81 | Rp 100,814.81        |
| 11-Jun-15 |       |      | 0      | 131.6             |               |                | Rp 100,814.81 | Rp 100,814.81        |
| 12-Jun-15 |       |      | 0      | 131.6             |               |                | Rp 100,814.81 | Rp 100,814.81        |
| 13-Jun-15 |       |      | 3.77   | 127.83            |               |                | Rp 97,926.73  | Rp 97,926.73         |
| 14-Jun-15 |       |      | 9.44   | 118.39            |               |                | Rp 90,695.03  | Rp 90,695.03         |
| 15-Jun-15 | 10.9  |      | 0      | 118.39            | Rp 131,774.28 |                | Rp 90,695.03  | Rp 222,469.31        |
| 16-Jun-15 |       |      | 0      | 118.39            |               |                | Rp 90,695.03  | Rp 90,695.03         |
| 17-Jun-15 |       |      | 0      | 118.39            |               |                | Rp 90,695.03  | Rp 90,695.03         |
| 18-Jun-15 |       | 10.9 | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 19-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 20-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 21-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 22-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 23-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 24-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 25-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 26-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 27-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 28-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 29-Jun-15 |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 30-Jun-15 | 10.9  |      | 0      | 129.29            | Rp 131,774.28 |                | Rp 99,045.19  | Rp 230,819.47        |
| 1-Jul-15  |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 2-Jul-15  |       |      | 0      | 129.29            |               |                | Rp 99,045.19  | Rp 99,045.19         |
| 3-Jul-15  |       | 10.9 | 0      | 140.19            |               |                | Rp 107,395.35 | Rp 107,395.35        |
| 4-Jul-15  |       |      | 0      | 140.19            |               |                | Rp 107,395.35 | Rp 107,395.35        |
| 5-Jul-15  |       |      | 0      | 140.19            |               |                | Rp 107,395.35 | Rp 107,395.35        |
| 6-Jul-15  |       |      | 0      | 140.19            |               |                | Rp 107,395.35 | Rp 107,395.35        |
| 7-Jul-15  |       |      | 0      | 140.19            |               |                | Rp 107,395.35 | Rp 107,395.35        |
| 8-Jul-15  |       |      | 0.67   | 139.52            |               |                | Rp 106,882.09 | Rp 106,882.09        |
| 9-Jul-15  |       |      | 0      | 139.52            |               |                | Rp 106,882.09 | Rp 106,882.09        |
| 10-Jul-15 |       |      | 1.52   | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 11-Jul-15 |       |      | 0      | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 12-Jul-15 |       |      | 0      | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 13-Jul-15 |       |      | 0      | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 14-Jul-15 |       |      | 0      | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 15-Jul-15 | 10.9  |      | 0      | 138               | Rp 131,774.28 |                | Rp 105,717.66 | Rp 237,491.94        |
| 16-Jul-15 |       |      | 0      | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 17-Jul-15 |       |      | 0      | 138               |               |                | Rp 105,717.66 | Rp 105,717.66        |
| 18-Jul-15 |       | 10.9 | 0      | 148.9             |               |                | Rp 114,067.82 | Rp 114,067.82        |
| 19-Jul-15 |       |      | 9.74   | 139.16            |               |                | Rp 106,606.30 | Rp 106,606.30        |
| 20-Jul-15 |       |      | 0.75   | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 21-Jul-15 |       |      | 0      | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 22-Jul-15 |       |      | 0      | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 23-Jul-15 |       |      | 0      | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 24-Jul-15 |       |      | 0      | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 25-Jul-15 |       |      | 0      | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 26-Jul-15 |       |      | 0      | 138.41            |               |                | Rp 106,031.75 | Rp 106,031.75        |
| 27-Jul-15 |       |      | 2.17   | 136.24            |               |                | Rp 104,369.38 | Rp 104,369.38        |
| 28-Jul-15 |       |      | 0      | 136.24            |               |                | Rp 104,369.38 | Rp 104,369.38        |
| 29-Jul-15 |       |      | 0      | 136.24            |               |                | Rp 104,369.38 | Rp 104,369.38        |
| 30-Jul-15 |       |      | 0      | 136.24            |               |                | Rp 104,369.38 | Rp 104,369.38        |
| 31-Jul-15 | 10.9  |      | 0      | 136.24            | Rp 131,774.28 |                | Rp 104,369.38 | Rp 236,143.66        |
| 1-Aug-15  |       |      | 0      | 136.24            |               |                | Rp 104,369.38 | Rp 104,369.38        |
| 2-Aug-15  |       | 10.9 | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 3-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 4-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 5-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 6-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 7-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 8-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 9-Aug-15  |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 10-Aug-15 |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 11-Aug-15 |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 12-Aug-15 |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 13-Aug-15 |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 14-Aug-15 |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 15-Aug-15 | 10.9  |      | 0      | 147.14            | Rp 131,774.28 |                | Rp 112,719.54 | Rp 244,493.82        |
| 16-Aug-15 |       |      | 0      | 147.14            |               |                | Rp 112,719.54 | Rp 112,719.54        |
| 17-Aug-15 |       | 10.9 | 0      | 158.04            |               |                | Rp 121,069.70 | Rp 121,069.70        |
| 18-Aug-15 |       |      | 0      | 158.04            |               |                | Rp 121,069.70 | Rp 121,069.70        |
| 19-Aug-15 |       |      | 1.84   | 156.2             |               |                | Rp 119,660.13 | Rp 119,660.13        |
| 20-Aug-15 |       |      | 0      | 156.2             |               |                | Rp 119,660.13 | Rp 119,660.13        |
| 21-Aug-15 |       |      | 0      | 156.2             |               |                | Rp 119,660.13 | Rp 119,660.13        |
| 22-Aug-15 |       |      | 0      | 156.2             |               |                | Rp 119,660.13 | Rp 119,660.13        |
| 23-Aug-15 |       |      | 0      | 156.2             |               |                | Rp 119,660.13 | Rp 119,660.13        |
| 24-Aug-15 |       |      | 9.8    | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 25-Aug-15 |       |      | 0      | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 26-Aug-15 |       |      | 0      | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 27-Aug-15 |       |      | 0      | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 28-Aug-15 |       |      | 0      | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 29-Aug-15 |       |      | 0      | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 30-Aug-15 |       |      | 0      | 146.4             |               |                | Rp 112,152.65 | Rp 112,152.65        |
| 31-Aug-15 | 10.9  |      | 0      | 146.4             | Rp 131,774.28 |                | Rp 112,152.65 | Rp 243,926.93        |
| 1-Sep-15  |       | 10.9 | 0      | 157.3             |               |                | Rp 120,502.81 | Rp 120,502.81        |
| 2-Sep-15  |       |      | 0      | 157.3             |               |                | Rp 120,502.81 | Rp 120,502.81        |
| 3-Sep-15  |       |      | 0      | 157.3             |               |                | Rp 120,502.81 | Rp 120,502.81        |
| 4-Sep-15  |       |      | 0      | 157.3             |               |                | Rp 120,502.81 | Rp 120,502.81        |
| 5-Sep-15  |       |      | 0      | 157.3             |               |                | Rp 120,502.81 | Rp 120,502.81        |
| 6-Sep-15  |       |      | 1.53   | 155.77            |               |                | Rp 119,330.72 | Rp 119,330.72        |
| 7-Sep-15  |       |      | 0      | 155.77            |               |                | Rp 119,330.72 | Rp 119,330.72        |
| 8-Sep-15  |       |      | 0      | 155.77            |               |                | Rp 119,330.72 | Rp 119,330.72        |
| 9-Sep-15  |       |      | 0      | 155.77            |               |                | Rp 119,330.72 | Rp 119,330.72        |
| 10-Sep-15 |       |      | 0      | 155.77            |               |                | Rp 119,330.72 | Rp 119,330.72        |
| 11-Sep-15 |       |      | 0      | 155.77            |               |                | Rp 119,330.72 | Rp 119,330.72        |
| 12-Sep-15 |       |      | 0.01   | 155.76            |               |                | Rp 119,323.06 | Rp 119,323.06        |
| 13-Sep-15 |       |      | 0      | 155.76            |               |                | Rp 119,323.06 | Rp 119,323.06        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 14-Sep-15 |       |      | 0      | 155.76            |               |                | Rp 119,323.06 | Rp 119,323.06        |
| 15-Sep-15 | 10.9  |      | 0      | 155.76            | Rp 131,774.28 |                | Rp 119,323.06 | Rp 251,097.34        |
| 16-Sep-15 |       |      | 0      | 155.76            |               |                | Rp 119,323.06 | Rp 119,323.06        |
| 17-Sep-15 |       |      | 0      | 155.76            |               |                | Rp 119,323.06 | Rp 119,323.06        |
| 18-Sep-15 |       | 10.9 | 0      | 166.66            |               |                | Rp 127,673.23 | Rp 127,673.23        |
| 19-Sep-15 |       |      | 0      | 166.66            |               |                | Rp 127,673.23 | Rp 127,673.23        |
| 20-Sep-15 |       |      | 0      | 166.66            |               |                | Rp 127,673.23 | Rp 127,673.23        |
| 21-Sep-15 |       |      | 0      | 166.66            |               |                | Rp 127,673.23 | Rp 127,673.23        |
| 22-Sep-15 |       |      | 0      | 166.66            |               |                | Rp 127,673.23 | Rp 127,673.23        |
| 23-Sep-15 |       |      | 8.74   | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 24-Sep-15 |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 25-Sep-15 |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 26-Sep-15 |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 27-Sep-15 |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 28-Sep-15 |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 29-Sep-15 |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 30-Sep-15 | 10.9  |      | 0      | 157.92            | Rp 131,774.28 |                | Rp 120,977.77 | Rp 252,752.05        |
| 1-Oct-15  |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 2-Oct-15  |       |      | 0      | 157.92            |               |                | Rp 120,977.77 | Rp 120,977.77        |
| 3-Oct-15  |       | 10.9 | 0      | 168.82            |               |                | Rp 129,327.94 | Rp 129,327.94        |
| 4-Oct-15  |       |      | 0      | 168.82            |               |                | Rp 129,327.94 | Rp 129,327.94        |
| 5-Oct-15  |       |      | 0      | 168.82            |               |                | Rp 129,327.94 | Rp 129,327.94        |
| 6-Oct-15  |       |      | 0      | 168.82            |               |                | Rp 129,327.94 | Rp 129,327.94        |
| 7-Oct-15  |       |      | 0      | 168.82            |               |                | Rp 129,327.94 | Rp 129,327.94        |
| 8-Oct-15  |       |      | 2.27   | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 9-Oct-15  |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 10-Oct-15 |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 11-Oct-15 |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 12-Oct-15 |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 13-Oct-15 |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 14-Oct-15 |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 15-Oct-15 | 10.9  |      | 0      | 166.55            | Rp 131,774.28 |                | Rp 127,588.96 | Rp 259,363.24        |
| 16-Oct-15 |       |      | 0      | 166.55            |               |                | Rp 127,588.96 | Rp 127,588.96        |
| 17-Oct-15 |       |      | 0.7    | 165.85            |               |                | Rp 127,052.71 | Rp 127,052.71        |
| 18-Oct-15 |       |      | 1.3    | 164.55            |               |                | Rp 126,056.82 | Rp 126,056.82        |
| 19-Oct-15 |       | 10.9 | 0      | 175.45            |               |                | Rp 134,406.98 | Rp 134,406.98        |
| 20-Oct-15 |       |      | 0      | 175.45            |               |                | Rp 134,406.98 | Rp 134,406.98        |
| 21-Oct-15 |       |      | 0      | 175.45            |               |                | Rp 134,406.98 | Rp 134,406.98        |
| 22-Oct-15 |       |      | 9.23   | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 23-Oct-15 |       |      | 0      | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 24-Oct-15 |       |      | 0      | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 25-Oct-15 |       |      | 0      | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 26-Oct-15 |       |      | 0      | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 27-Oct-15 |       |      | 0      | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 28-Oct-15 |       |      | 0      | 166.22            |               |                | Rp 127,336.16 | Rp 127,336.16        |
| 29-Oct-15 |       |      | 3.21   | 163.01            |               |                | Rp 124,877.07 | Rp 124,877.07        |
| 30-Oct-15 |       |      | 0.02   | 162.99            |               |                | Rp 124,861.75 | Rp 124,861.75        |
| 31-Oct-15 | 10.9  |      | 0      | 162.99            | Rp 131,774.28 |                | Rp 124,861.75 | Rp 256,636.03        |
| 1-Nov-15  |       |      | 0      | 162.99            |               |                | Rp 124,861.75 | Rp 124,861.75        |
| 2-Nov-15  |       |      | 0      | 162.99            |               |                | Rp 124,861.75 | Rp 124,861.75        |
| 3-Nov-15  |       | 10.9 | 0      | 173.89            |               |                | Rp 133,211.91 | Rp 133,211.91        |
| 4-Nov-15  |       |      | 0      | 173.89            |               |                | Rp 133,211.91 | Rp 133,211.91        |
| 5-Nov-15  |       |      | 0      | 173.89            |               |                | Rp 133,211.91 | Rp 133,211.91        |
| 6-Nov-15  |       |      | 0      | 173.89            |               |                | Rp 133,211.91 | Rp 133,211.91        |
| 7-Nov-15  |       |      | 0      | 173.89            |               |                | Rp 133,211.91 | Rp 133,211.91        |
| 8-Nov-15  |       |      | 19.51  | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 9-Nov-15  |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 10-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 11-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 12-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 13-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 14-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 15-Nov-15 | 10.9  |      | 0      | 154.38            | Rp 131,774.28 |                | Rp 118,265.89 | Rp 250,040.17        |
| 16-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 17-Nov-15 |       |      | 0      | 154.38            |               |                | Rp 118,265.89 | Rp 118,265.89        |
| 18-Nov-15 |       | 10.9 | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 19-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 20-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 21-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 22-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 23-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 24-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 25-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 26-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost  | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|---------------|----------------------|
| 27-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 28-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 29-Nov-15 |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 30-Nov-15 | 10.9  |      | 0      | 165.28            | Rp 131,774.28 |                | Rp 126,616.05 | Rp 258,390.33        |
| 1-Dec-15  |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 2-Dec-15  |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 3-Dec-15  |       |      | 0      | 165.28            |               |                | Rp 126,616.05 | Rp 126,616.05        |
| 4-Dec-15  |       | 10.9 | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 5-Dec-15  |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 6-Dec-15  |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 7-Dec-15  |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 8-Dec-15  |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 9-Dec-15  |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 10-Dec-15 |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 11-Dec-15 |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 12-Dec-15 |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 13-Dec-15 |       |      | 0      | 176.18            |               |                | Rp 134,966.21 | Rp 134,966.21        |
| 14-Dec-15 |       |      | 1.98   | 174.2             |               |                | Rp 133,449.39 | Rp 133,449.39        |
| 15-Dec-15 | 10.9  |      | 0      | 174.2             | Rp 131,774.28 |                | Rp 133,449.39 | Rp 265,223.67        |
| 16-Dec-15 |       |      | 0      | 174.2             |               |                | Rp 133,449.39 | Rp 133,449.39        |
| 17-Dec-15 |       |      | 0      | 174.2             |               |                | Rp 133,449.39 | Rp 133,449.39        |
| 18-Dec-15 |       | 10.9 | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 19-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 20-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 21-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 22-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 23-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 24-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 25-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 26-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 27-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 28-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 29-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 30-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
| 31-Dec-15 |       |      | 0      | 185.1             |               |                | Rp 141,799.56 | Rp 141,799.56        |
|           |       |      | 43     |                   | 23            | 0              |               | Rp 40,573,294.50     |



## APPENDIX C

### EXISTING SYSTEM LEAD TIME (AC 260 Gr 79 x 109)

#### Random Value

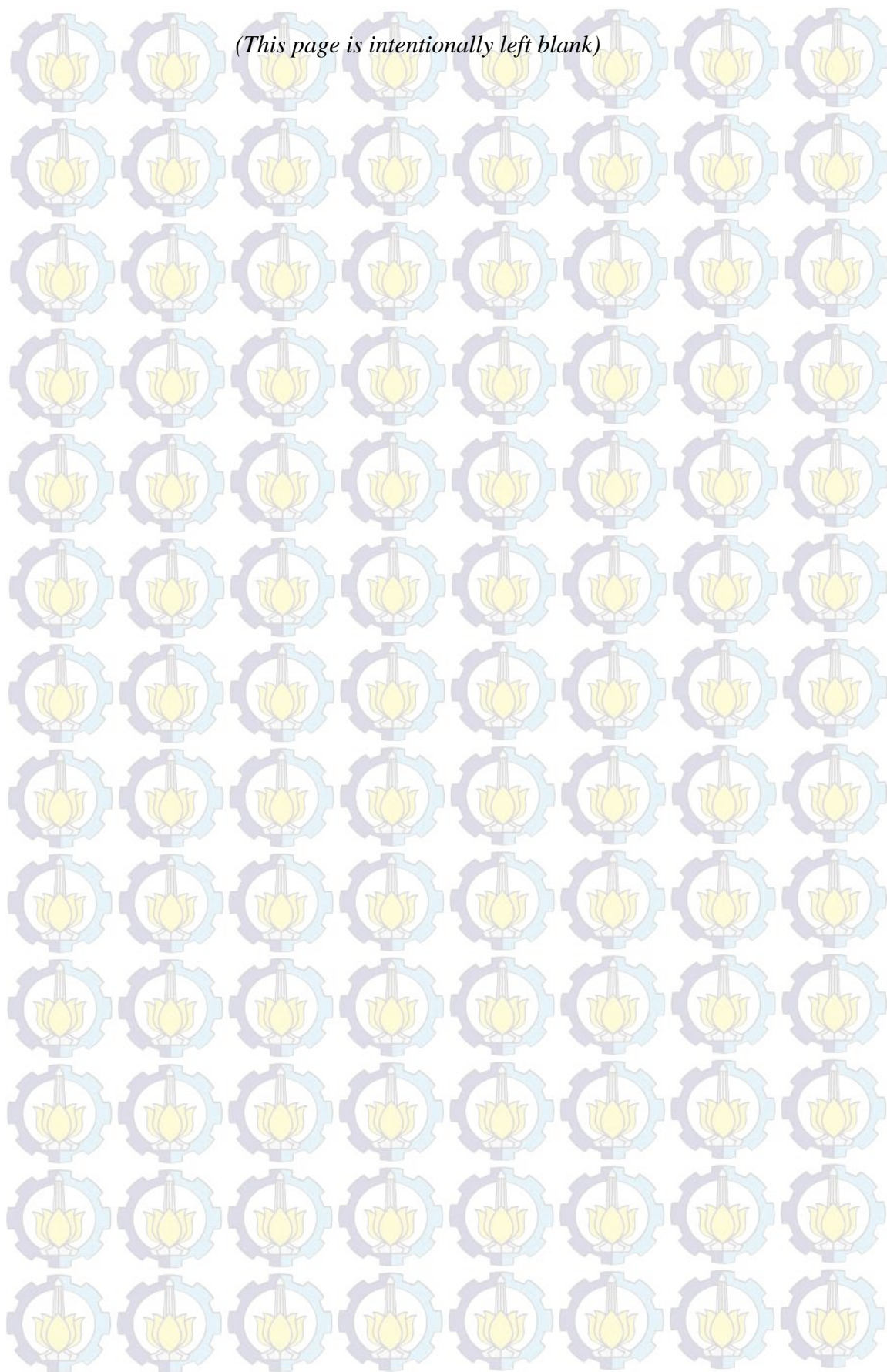
| No | Random 1   | Random2    | Random 3   | Random 4   | Random 5   | Random 6   | Random 7   |
|----|------------|------------|------------|------------|------------|------------|------------|
| 1  | 0.30661579 | 0.51430301 | 0.55460328 | 0.1421216  | 0.33291235 | 0.8169408  | 0.92941317 |
| 2  | 0.33095263 | 0.45752559 | 0.11612059 | 0.51807934 | 0.78160492 | 0.44790567 | 0.46754753 |
| 3  | 0.32225521 | 0.02702922 | 0.69779051 | 0.572937   | 0.67453434 | 0.52163047 | 0.19407455 |
| 4  | 0.19851182 | 0.73194421 | 0.17312215 | 0.79566094 | 0.98869527 | 0.27783338 | 0.0128584  |
| 5  | 0.75284861 | 0.40200787 | 0.51835004 | 0.63808194 | 0.30437507 | 0.38992686 | 0.26312871 |
| 6  | 0.43070285 | 0.18347256 | 0.11164109 | 0.15078566 | 0.80052892 | 0.16943156 | 0.37266221 |
| 7  | 0.38493577 | 0.73330307 | 0.96176631 | 0.43061984 | 0.65302316 | 0.25949138 | 0.90414135 |
| 8  | 0.29655599 | 0.69800677 | 0.73105921 | 0.43136298 | 0.91643414 | 0.76422556 | 0.6359308  |
| 9  | 0.85187587 | 0.45122671 | 0.4811522  | 0.74228734 | 0.44324918 | 0.70662565 | 0.7315081  |
| 10 | 0.47103019 | 0.92388628 | 0.72726506 | 0.52231921 | 0.73422071 | 0.13102459 | 0.61487503 |
| 11 | 0.03843206 | 0.85728608 | 0.14031662 | 0.60416962 | 0.03795645 | 0.2568775  | 0.75218605 |
| 12 | 0.83201922 | 0.05860117 | 0.44365421 | 0.55208858 | 0.47849651 | 0.18369061 | 0.72470729 |
| 13 | 0.50955461 | 0.53658593 | 0.84831374 | 0.85811333 | 0.78111674 | 0.84008415 | 0.56298675 |
| 14 | 0.32816501 | 0.63538766 | 0.30126672 | 0.74927239 | 0.69578371 | 0.42919313 | 0.39290199 |
| 15 | 0.61014056 | 0.23677392 | 0.46499187 | 0.65123324 | 0.48443757 | 0.25549799 | 0.43887596 |
| 16 | 0.27424667 | 0.19355733 | 0.1872     | 0.33286626 | 0.7615536  | 0.01665031 | 0.10002587 |
| 17 | 0.69724852 | 0.54156529 | 0.73320793 | 0.695778   | 0.55109333 | 0.13195019 | 0.62256115 |
| 18 | 0.43203544 | 0.22254036 | 0.00572245 | 0.94000541 | 0.95868194 | 0.92083351 | 0.7065144  |
| 19 | 0.61420507 | 0.10672924 | 0.88802645 | 0.48679136 | 0.47928158 | 0.68496325 | 0.86465825 |
| 20 | 0.0654654  | 0.22623174 | 0.60182553 | 0.92995848 | 0.57741413 | 0.57106868 | 0.71336848 |
| 21 | 0.47461235 | 0.85631405 | 0.80811193 | 0.87701146 | 0.18992614 | 0.65701631 | 0.63371312 |
| 22 | 0.93854414 | 0.48422514 | 0.43489332 | 0.09619222 | 0.75683849 | 0.14698837 | 0.82406215 |
| 23 | 0.59487602 | 0.90760413 | 0.36405491 | 0.88883216 | 0.3847078  | 0.27261481 | 0.58642115 |

#### Generated Lead Time

| No | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 |
|----|---------|---------|---------|---------|---------|---------|---------|
| 1  | 2       | 3       | 3       | 1       | 2       | 4       | 6       |
| 2  | 2       | 2       | 1       | 3       | 3       | 2       | 2       |
| 3  | 2       | 1       | 3       | 3       | 3       | 3       | 2       |
| 4  | 2       | 3       | 2       | 3       | 8       | 2       | 1       |
| 5  | 3       | 2       | 3       | 3       | 2       | 2       | 2       |
| 6  | 2       | 2       | 1       | 2       | 4       | 2       | 2       |
| 7  | 2       | 3       | 8       | 2       | 3       | 2       | 6       |
| 8  | 2       | 3       | 3       | 2       | 6       | 3       | 3       |
| 9  | 4       | 2       | 2       | 3       | 2       | 3       | 3       |
| 10 | 2       | 6       | 3       | 3       | 3       | 1       | 3       |
| 11 | 1       | 4       | 1       | 3       | 1       | 2       | 3       |
| 12 | 4       | 1       | 2       | 3       | 2       | 2       | 3       |
| 13 | 3       | 3       | 4       | 4       | 3       | 4       | 3       |
| 14 | 2       | 3       | 2       | 3       | 3       | 2       | 2       |
| 15 | 3       | 2       | 2       | 3       | 2       | 2       | 2       |
| 16 | 2       | 2       | 2       | 2       | 3       | 1       | 1       |
| 17 | 3       | 3       | 3       | 3       | 3       | 1       | 3       |
| 18 | 2       | 2       | 1       | 6       | 8       | 6       | 3       |
| 19 | 3       | 1       | 4       | 2       | 2       | 3       | 4       |
| 20 | 1       | 2       | 3       | 6       | 3       | 3       | 3       |
| 21 | 2       | 4       | 4       | 4       | 2       | 3       | 3       |
| 22 | 6       | 2       | 2       | 1       | 3       | 1       | 4       |
| 23 | 3       | 6       | 2       | 4       | 2       | 2       | 3       |



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## APPENDIX D

### CONTINUOUS REVIEW REPLICATION (AC 260 Gr 79 x 109)

#### Replication 1

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |    | 9.84   | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 10-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 11-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 12-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 13-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 14-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 15-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 16-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 17-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 18-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 19-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 20-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 21-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 22-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 23-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 24-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 25-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 26-Jan-15 |       |    | 0.89   | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 27-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 28-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 29-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 30-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 31-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 1-Feb-15  |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 2-Feb-15  |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 3-Feb-15  |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 4-Feb-15  |       |    | 1.85   | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 5-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 6-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 7-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 8-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 9-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 10-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 11-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 12-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 13-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 14-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 15-Feb-15 |       |    | 0.29   | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 16-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 17-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 18-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 19-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 20-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 21-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 22-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 23-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 24-Feb-15 |       |    | 16.29  | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 25-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 26-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 27-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 28-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 1-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 2-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 3-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 4-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 5-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 6-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 7-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 8-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 9-Mar-15  |       |    | 7.74   | 47.85             |            |                | Rp 36,656.45 | Rp 36,656.45         |
| 10-Mar-15 |       |    | 0      | 47.85             |            |                | Rp 36,656.45 | Rp 36,656.45         |
| 11-Mar-15 |       |    | 2.32   | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 12-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 13-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 14-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 15-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 16-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 17-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 18-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 19-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 20-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 21-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 22-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 23-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 24-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 25-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 26-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 27-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 28-Mar-15 |       |    | 0      | 45.53             |            |                | Rp 34,879.17 | Rp 34,879.17         |
| 29-Mar-15 |       |    | 4.82   | 40.71             |            |                | Rp 31,186.71 | Rp 31,186.71         |
| 30-Mar-15 |       |    | 2.06   | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 31-Mar-15 |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 1-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 2-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 3-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 4-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 5-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 6-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 7-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 8-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 9-Apr-15  |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 10-Apr-15 |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 11-Apr-15 |       |    | 0      | 38.65             |            |                | Rp 29,608.61 | Rp 29,608.61         |
| 12-Apr-15 |       |    | 2.91   | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 13-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 14-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 15-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 16-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 17-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 18-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 19-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 20-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 21-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 22-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 23-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 24-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 25-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 26-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 27-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 28-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 29-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 30-Apr-15 |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 1-May-15  |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 2-May-15  |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 3-May-15  |       |    | 0      | 35.74             |            |                | Rp 27,379.34 | Rp 27,379.34         |
| 4-May-15  |       |    | 0.61   | 35.13             |            |                | Rp 26,912.04 | Rp 26,912.04         |
| 5-May-15  |       |    | 0      | 35.13             |            |                | Rp 26,912.04 | Rp 26,912.04         |
| 6-May-15  |       |    | 0      | 35.13             |            |                | Rp 26,912.04 | Rp 26,912.04         |
| 7-May-15  |       |    | 17.57  | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 8-May-15  |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 9-May-15  |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 10-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 11-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 12-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 13-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 14-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 15-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 16-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 17-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |
| 18-May-15 |       |    | 0      | 17.56             |            |                | Rp 13,452.19 | Rp 13,452.19         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 19-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 20-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 21-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 22-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 23-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 24-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 25-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 26-May-15 |       |       | 3.61   | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 27-May-15 |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 28-May-15 |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 29-May-15 |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 30-May-15 |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 31-May-15 |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 1-Jun-15  |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 2-Jun-15  |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 3-Jun-15  |       |       | 0      | 13.95             |               |                | Rp 10,686.68 | Rp 10,686.68         |
| 4-Jun-15  |       |       | 1      | 12.95             |               |                | Rp 9,920.61  | Rp 9,920.61          |
| 5-Jun-15  |       |       | 0      | 12.95             |               |                | Rp 9,920.61  | Rp 9,920.61          |
| 6-Jun-15  |       |       | 0      | 12.95             |               |                | Rp 9,920.61  | Rp 9,920.61          |
| 7-Jun-15  |       |       | 0      | 12.95             |               |                | Rp 9,920.61  | Rp 9,920.61          |
| 8-Jun-15  |       |       | 0      | 12.95             |               |                | Rp 9,920.61  | Rp 9,920.61          |
| 9-Jun-15  |       |       | 0      | 12.95             |               |                | Rp 9,920.61  | Rp 9,920.61          |
| 10-Jun-15 | 11.63 |       | 8.07   | 4.88              | Rp 131,774.28 |                | Rp 3,738.42  | Rp 135,512.70        |
| 11-Jun-15 |       |       | 0      | 4.88              |               |                | Rp 3,738.42  | Rp 3,738.42          |
| 12-Jun-15 |       | 11.63 | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 13-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 14-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 15-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 16-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 17-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 18-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 19-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 20-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 21-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 22-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 23-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 24-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 25-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 26-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 27-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 28-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 29-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 30-Jun-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 1-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 2-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 3-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 4-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 5-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 6-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 7-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 8-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 9-Jul-15  |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 10-Jul-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 11-Jul-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 12-Jul-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 13-Jul-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 14-Jul-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 15-Jul-15 |       |       | 0      | 16.51             |               |                | Rp 12,647.82 | Rp 12,647.82         |
| 16-Jul-15 |       |       | 2.95   | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 17-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 18-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 19-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 20-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 21-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 22-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 23-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 24-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 25-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 26-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 27-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 28-Jul-15 |       |       | 0      | 13.56             |               |                | Rp 10,387.91 | Rp 10,387.91         |
| 29-Jul-15 |       |       | 1.21   | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 30-Jul-15 |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 31-Jul-15 |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 1-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 2-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 3-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 4-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 5-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 6-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 7-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 8-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 9-Aug-15  |       |       | 0      | 12.35             |               |                | Rp 9,460.96  | Rp 9,460.96          |
| 10-Aug-15 |       |       | 1.05   | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 11-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 12-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 13-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 14-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 15-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 16-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 17-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 18-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 19-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 20-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 21-Aug-15 |       |       | 0      | 11.3              |               |                | Rp 8,656.59  | Rp 8,656.59          |
| 22-Aug-15 |       |       | 1.33   | 9.97              |               |                | Rp 7,637.72  | Rp 7,637.72          |
| 23-Aug-15 |       |       | 0      | 9.97              |               |                | Rp 7,637.72  | Rp 7,637.72          |
| 24-Aug-15 |       |       | 0      | 9.97              |               |                | Rp 7,637.72  | Rp 7,637.72          |
| 25-Aug-15 |       |       | 1.65   | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 26-Aug-15 |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 27-Aug-15 |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 28-Aug-15 |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 29-Aug-15 |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 30-Aug-15 |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 31-Aug-15 |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 1-Sep-15  |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 2-Sep-15  |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 3-Sep-15  |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 4-Sep-15  |       |       | 0      | 8.32              |               |                | Rp 6,373.70  | Rp 6,373.70          |
| 5-Sep-15  | 11.63 |       | 3.48   | 4.84              | Rp 131,774.28 |                | Rp 3,707.78  | Rp 135,482.06        |
| 6-Sep-15  |       |       | 0      | 4.84              |               |                | Rp 3,707.78  | Rp 3,707.78          |
| 7-Sep-15  |       |       | 0      | 4.84              |               |                | Rp 3,707.78  | Rp 3,707.78          |
| 8-Sep-15  |       | 11.63 | 0      | 16.47             |               |                | Rp 12,617.17 | Rp 12,617.17         |
| 9-Sep-15  |       |       | 0      | 16.47             |               |                | Rp 12,617.17 | Rp 12,617.17         |
| 10-Sep-15 |       |       | 0      | 16.47             |               |                | Rp 12,617.17 | Rp 12,617.17         |
| 11-Sep-15 |       |       | 0      | 16.47             |               |                | Rp 12,617.17 | Rp 12,617.17         |
| 12-Sep-15 |       |       | 0      | 16.47             |               |                | Rp 12,617.17 | Rp 12,617.17         |
| 13-Sep-15 |       |       | 0      | 16.47             |               |                | Rp 12,617.17 | Rp 12,617.17         |
| 14-Sep-15 |       |       | 0.29   | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 15-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 16-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 17-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 18-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 19-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 20-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 21-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 22-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 23-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 24-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 25-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 26-Sep-15 |       |       | 0      | 16.18             |               |                | Rp 12,395.01 | Rp 12,395.01         |
| 27-Sep-15 |       |       | 2.65   | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 28-Sep-15 |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 29-Sep-15 |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 30-Sep-15 |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 1-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 2-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 3-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 4-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 5-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 6-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 7-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 8-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 9-Oct-15  |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 10-Oct-15 |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 11-Oct-15 |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 12-Oct-15 |       |       | 0      | 13.53             |               |                | Rp 10,364.93 | Rp 10,364.93         |
| 13-Oct-15 |       |       | 1.21   | 12.32             |               |                | Rp 9,437.98  | Rp 9,437.98          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 14-Oct-15 |       |       | 0      | 12.32             |               |                | Rp 9,437.98  | Rp 9,437.98          |
| 15-Oct-15 |       |       | 3.86   | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 16-Oct-15 |       |       | 0      | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 17-Oct-15 |       |       | 0      | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 18-Oct-15 |       |       | 0      | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 19-Oct-15 |       |       | 0      | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 20-Oct-15 | 11.63 |       | 5.74   | 2.72              | Rp 131,774.28 |                | Rp 2,083.71  | Rp 133,857.99        |
| 21-Oct-15 |       |       | 0      | 2.72              |               |                | Rp 2,083.71  | Rp 2,083.71          |
| 22-Oct-15 |       |       | 0      | 2.72              |               |                | Rp 2,083.71  | Rp 2,083.71          |
| 23-Oct-15 |       | 11.63 | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 24-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 25-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 26-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 27-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 28-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 29-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 30-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 31-Oct-15 |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 1-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 2-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 3-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 4-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 5-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 6-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 7-Nov-15  |       |       | 0      | 14.35             |               |                | Rp 10,993.10 | Rp 10,993.10         |
| 8-Nov-15  |       |       | 1.29   | 13.06             |               |                | Rp 10,004.87 | Rp 10,004.87         |
| 9-Nov-15  |       |       | 0      | 13.06             |               |                | Rp 10,004.87 | Rp 10,004.87         |
| 10-Nov-15 |       |       | 0.95   | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 11-Nov-15 |       |       | 0      | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 12-Nov-15 |       |       | 0      | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 13-Nov-15 |       |       | 0      | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 14-Nov-15 |       |       | 0      | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 15-Nov-15 |       |       | 0      | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 16-Nov-15 |       |       | 0      | 12.11             |               |                | Rp 9,277.11  | Rp 9,277.11          |
| 17-Nov-15 |       |       | 0.53   | 11.58             |               |                | Rp 8,871.09  | Rp 8,871.09          |
| 18-Nov-15 |       |       | 0      | 11.58             |               |                | Rp 8,871.09  | Rp 8,871.09          |
| 19-Nov-15 |       |       | 0      | 11.58             |               |                | Rp 8,871.09  | Rp 8,871.09          |
| 20-Nov-15 |       |       | 0      | 11.58             |               |                | Rp 8,871.09  | Rp 8,871.09          |
| 21-Nov-15 |       |       | 0      | 11.58             |               |                | Rp 8,871.09  | Rp 8,871.09          |
| 22-Nov-15 | 11.63 |       | 8.24   | 3.34              | Rp 131,774.28 |                | Rp 2,558.67  | Rp 134,332.95        |
| 23-Nov-15 |       |       | 0      | 3.34              |               |                | Rp 2,558.67  | Rp 2,558.67          |
| 24-Nov-15 |       |       | 0      | 3.34              |               |                | Rp 2,558.67  | Rp 2,558.67          |
| 25-Nov-15 |       | 11.63 | 0      | 14.97             |               |                | Rp 11,468.07 | Rp 11,468.07         |
| 26-Nov-15 |       |       | 0      | 14.97             |               |                | Rp 11,468.07 | Rp 11,468.07         |
| 27-Nov-15 |       |       | 0      | 14.97             |               |                | Rp 11,468.07 | Rp 11,468.07         |
| 28-Nov-15 |       |       | 0      | 14.97             |               |                | Rp 11,468.07 | Rp 11,468.07         |
| 29-Nov-15 |       |       | 0.97   | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 30-Nov-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 1-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 2-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 3-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 4-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 5-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 6-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 7-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 8-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 9-Dec-15  |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 10-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 11-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 12-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 13-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 14-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 15-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 16-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 17-Dec-15 |       |       | 0      | 14                |               |                | Rp 10,724.98 | Rp 10,724.98         |
| 18-Dec-15 |       |       | 0.34   | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 19-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 20-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 21-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 22-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 23-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 24-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 25-Dec-15 |       |       | 0      | 13.66             |               |                | Rp 10,464.52 | Rp 10,464.52         |
| 26-Dec-15 |       |       | 0.14   | 13.52             |               |                | Rp 10,357.27 | Rp 10,357.27         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 27-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 28-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 29-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 30-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
| 31-Dec-15 |       |    | 0      | 13.52             |            |                | Rp 10,357.27 | Rp 10,357.27         |
|           |       |    |        |                   |            |                |              | Rp 8,528,989.38      |

## Replication 2

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0.25   | 84.5              |            |                | Rp 64,732.92 | Rp 64,732.92         |
| 5-Jan-15  |       |    | 0      | 84.5              |            |                | Rp 64,732.92 | Rp 64,732.92         |
| 6-Jan-15  |       |    | 0      | 84.5              |            |                | Rp 64,732.92 | Rp 64,732.92         |
| 7-Jan-15  |       |    | 1.01   | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 8-Jan-15  |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 9-Jan-15  |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 10-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 11-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 12-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 13-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 14-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 15-Jan-15 |       |    | 3.23   | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 16-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 17-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 18-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 19-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 20-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 21-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 22-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 23-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 24-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 25-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 26-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 27-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 28-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 29-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 30-Jan-15 |       |    | 1.5    | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 31-Jan-15 |       |    | 0      | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 1-Feb-15  |       |    | 0      | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 2-Feb-15  |       |    | 0      | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 3-Feb-15  |       |    | 1.17   | 77.59             |            |                | Rp 59,439.37 | Rp 59,439.37         |
| 4-Feb-15  |       |    | 2.09   | 75.5              |            |                | Rp 57,838.29 | Rp 57,838.29         |
| 5-Feb-15  |       |    | 1.38   | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 6-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 7-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 8-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 9-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 10-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 11-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 12-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 13-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 14-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 15-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 16-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 17-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 18-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 19-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 20-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 21-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 22-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 23-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 24-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 25-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 26-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 27-Feb-15 |       |    | 3.07   | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 28-Feb-15 |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 1-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 2-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 3-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 4-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 5-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 6-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 7-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 8-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 9-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 10-Mar-15 |       |    | 0.13   | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 11-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 12-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 13-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 14-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 15-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 16-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 17-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 18-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 19-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 20-Mar-15 |       |    | 2.51   | 68.41             |            |                | Rp 52,406.85 | Rp 52,406.85         |
| 21-Mar-15 |       |    | 0      | 68.41             |            |                | Rp 52,406.85 | Rp 52,406.85         |
| 22-Mar-15 |       |    | 0.18   | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 23-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 24-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 25-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 26-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 27-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 28-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 29-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 30-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 31-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 1-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 2-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 3-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 4-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 5-Apr-15  |       |    | 1.51   | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 6-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 7-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 8-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 9-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 10-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 11-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 12-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 13-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 14-Apr-15 |       |    | 5.86   | 60.86             |            |                | Rp 46,623.02 | Rp 46,623.02         |
| 15-Apr-15 |       |    | 0      | 60.86             |            |                | Rp 46,623.02 | Rp 46,623.02         |
| 16-Apr-15 |       |    | 0      | 60.86             |            |                | Rp 46,623.02 | Rp 46,623.02         |
| 17-Apr-15 |       |    | 1.37   | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 18-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 19-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 20-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 21-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 22-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 23-Apr-15 |       |    | 1.14   | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 24-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 25-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 26-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 27-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 28-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 29-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 30-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 1-May-15  |       |    | 0.58   | 57.77             |            |                | Rp 44,255.86 | Rp 44,255.86         |
| 2-May-15  |       |    | 0      | 57.77             |            |                | Rp 44,255.86 | Rp 44,255.86         |
| 3-May-15  |       |    | 0      | 57.77             |            |                | Rp 44,255.86 | Rp 44,255.86         |
| 4-May-15  |       |    | 1.96   | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 5-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 6-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 7-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 8-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 9-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 10-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 11-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 12-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 13-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 14-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 15-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 16-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 17-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 18-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 19-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 20-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 21-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 22-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 23-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 24-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 25-May-15 |       |    | 3.01   | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 26-May-15 |       |    | 0      | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 27-May-15 |       |    | 0      | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 28-May-15 |       |    | 0      | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 29-May-15 |       |    | 0.85   | 51.95             |            |                | Rp 39,797.34 | Rp 39,797.34         |
| 30-May-15 |       |    | 0      | 51.95             |            |                | Rp 39,797.34 | Rp 39,797.34         |
| 31-May-15 |       |    | 7.4    | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 1-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 2-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 3-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 4-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 5-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 6-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 7-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 8-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 9-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 10-Jun-15 |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 11-Jun-15 |       |    | 2.01   | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 12-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 13-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 14-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 15-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 16-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 17-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 18-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 19-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 20-Jun-15 |       |    | 0.87   | 41.67             |            |                | Rp 31,922.14 | Rp 31,922.14         |
| 21-Jun-15 |       |    | 0      | 41.67             |            |                | Rp 31,922.14 | Rp 31,922.14         |
| 22-Jun-15 |       |    | 0.63   | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 23-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 24-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 25-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 26-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 27-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 28-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 29-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 30-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 1-Jul-15  |       |    | 0.93   | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 2-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 3-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 4-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 5-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 6-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 7-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 8-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 9-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 10-Jul-15 |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 11-Jul-15 |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 12-Jul-15 |       |    | 1.27   | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 13-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 14-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 15-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 16-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 17-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 18-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 19-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 20-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 21-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 22-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 23-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 24-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 25-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 26-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 27-Jul-15 |       |    | 0.28   | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 28-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 29-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 30-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 31-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 1-Aug-15  |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 2-Aug-15  |       |    | 2.37   | 36.19             |            |                | Rp 27,724.07 | Rp 27,724.07         |
| 3-Aug-15  |       |    | 0      | 36.19             |            |                | Rp 27,724.07 | Rp 27,724.07         |
| 4-Aug-15  |       |    | 0.93   | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 5-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 6-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 7-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 8-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 9-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 10-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 11-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 12-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 13-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 14-Aug-15 |       |    | 3.06   | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 15-Aug-15 |       |    | 0      | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 16-Aug-15 |       |    | 0      | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 17-Aug-15 |       |    | 0      | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 18-Aug-15 |       |    | 2.81   | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 19-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 20-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 21-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 22-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 23-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 24-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 25-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 26-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 27-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 28-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 29-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 30-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 31-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 1-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 2-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 3-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 4-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 5-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 6-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 7-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 8-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 9-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 10-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 11-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 12-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 13-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 14-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 15-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 16-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 17-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 18-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 19-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 20-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 21-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 22-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 23-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 24-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 25-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 26-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 27-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 28-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 29-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 30-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 1-Oct-15  |       |    | 2.34   | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 2-Oct-15  |       |    | 0      | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 3-Oct-15  |       |    | 0      | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 4-Oct-15  |       |    | 0      | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 5-Oct-15  |       |    | 17.94  | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 6-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 7-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 8-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 9-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 10-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 11-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 12-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 13-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 14-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 15-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 16-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 17-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 18-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 19-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 20-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 21-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 22-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 23-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 24-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 25-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 26-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 27-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 28-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 29-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 30-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 31-Oct-15 |       |       | 0.64   | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 1-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 2-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 3-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 4-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 5-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 6-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 7-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 8-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 9-Nov-15  |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 10-Nov-15 | 11.63 |       | 5.35   | 3.12              | Rp 131,774.28 |                | Rp 2,390.14  | Rp 134,164.42        |
| 11-Nov-15 |       | 11.63 | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 12-Nov-15 |       |       | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 13-Nov-15 |       |       | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 14-Nov-15 |       |       | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 15-Nov-15 |       |       | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 16-Nov-15 |       |       | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 17-Nov-15 |       |       | 0      | 14.75             |               |                | Rp 11,299.53 | Rp 11,299.53         |
| 18-Nov-15 |       |       | 0.29   | 14.46             |               |                | Rp 11,077.37 | Rp 11,077.37         |
| 19-Nov-15 |       |       | 3.8    | 10.66             |               |                | Rp 8,166.31  | Rp 8,166.31          |
| 20-Nov-15 |       |       | 0      | 10.66             |               |                | Rp 8,166.31  | Rp 8,166.31          |
| 21-Nov-15 |       |       | 3.99   | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 22-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 23-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 24-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 25-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 26-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 27-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 28-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 29-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 30-Nov-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 1-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 2-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 3-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 4-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 5-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 6-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 7-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 8-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 9-Dec-15  |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 10-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 11-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 12-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 13-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 14-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 15-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 16-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 17-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 18-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 19-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 20-Dec-15 |       |       | 0      | 6.67              |               |                | Rp 5,109.69  | Rp 5,109.69          |
| 21-Dec-15 | 11.63 |       | 1.47   | 5.2               | Rp 131,774.28 |                | Rp 3,983.56  | Rp 135,757.84        |
| 22-Dec-15 |       |       | 0      | 5.2               |               |                | Rp 3,983.56  | Rp 3,983.56          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|------------|----------------|--------------|----------------------|
| 23-Dec-15 |       |       | 0      | 5.2               |            |                | Rp 3,983.56  | Rp 3,983.56          |
| 24-Dec-15 |       | 11.63 | 0      | 16.83             |            |                | Rp 12,892.96 | Rp 12,892.96         |
| 25-Dec-15 |       |       | 0      | 16.83             |            |                | Rp 12,892.96 | Rp 12,892.96         |
| 26-Dec-15 |       |       | 0      | 16.83             |            |                | Rp 12,892.96 | Rp 12,892.96         |
| 27-Dec-15 |       |       | 0      | 16.83             |            |                | Rp 12,892.96 | Rp 12,892.96         |
| 28-Dec-15 |       |       | 1.47   | 15.36             |            |                | Rp 11,766.84 | Rp 11,766.84         |
| 29-Dec-15 |       |       | 0      | 15.36             |            |                | Rp 11,766.84 | Rp 11,766.84         |
| 30-Dec-15 |       |       | 0      | 15.36             |            |                | Rp 11,766.84 | Rp 11,766.84         |
| 31-Dec-15 |       |       | 0      | 15.36             |            |                | Rp 11,766.84 | Rp 11,766.84         |
|           |       |       |        |                   |            |                |              | Rp 12,334,659.10     |

### Replication 3

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 3.01   | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 3-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 4-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 5-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 6-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 7-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 8-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 9-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 10-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 11-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 12-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 13-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 14-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 15-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 16-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 17-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 18-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 19-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 20-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 21-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 22-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 23-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 24-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 25-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 26-Jan-15 |       |    | 1.39   | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 27-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 28-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 29-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 30-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 31-Jan-15 |       |    | 2.48   | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 1-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 2-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 3-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 4-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 5-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 6-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 7-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 8-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 9-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 10-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 11-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 12-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 13-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 14-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 15-Feb-15 |       |    | 0.43   | 77.44             |            |                | Rp 59,324.46 | Rp 59,324.46         |
| 16-Feb-15 |       |    | 0      | 77.44             |            |                | Rp 59,324.46 | Rp 59,324.46         |
| 17-Feb-15 |       |    | 0      | 77.44             |            |                | Rp 59,324.46 | Rp 59,324.46         |
| 18-Feb-15 |       |    | 3.56   | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 19-Feb-15 |       |    | 0      | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 20-Feb-15 |       |    | 0      | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 21-Feb-15 |       |    | 0      | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 22-Feb-15 |       |    | 1.57   | 72.31             |            |                | Rp 55,394.52 | Rp 55,394.52         |
| 23-Feb-15 |       |    | 0      | 72.31             |            |                | Rp 55,394.52 | Rp 55,394.52         |
| 24-Feb-15 |       |    | 0      | 72.31             |            |                | Rp 55,394.52 | Rp 55,394.52         |
| 25-Feb-15 |       |    | 0.63   | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 26-Feb-15 |       |    | 3.42   | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 27-Feb-15 |       |    | 0      | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 28-Feb-15 |       |    | 0      | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 1-Mar-15  |       |    | 0      | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 2-Mar-15  |       |    | 0.82   | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 3-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 4-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 5-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 6-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 7-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 8-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 9-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 10-Mar-15 |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 11-Mar-15 |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 12-Mar-15 |       |    | 8.5    | 58.94             |            |                | Rp 45,152.17 | Rp 45,152.17         |
| 13-Mar-15 |       |    | 0      | 58.94             |            |                | Rp 45,152.17 | Rp 45,152.17         |
| 14-Mar-15 |       |    | 0.35   | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 15-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 16-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 17-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 18-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 19-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 20-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 21-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 22-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 23-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 24-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 25-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 26-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 27-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 28-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 29-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 30-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 31-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 1-Apr-15  |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 2-Apr-15  |       |    | 0.26   | 58.33             |            |                | Rp 44,684.86 | Rp 44,684.86         |
| 3-Apr-15  |       |    | 0      | 58.33             |            |                | Rp 44,684.86 | Rp 44,684.86         |
| 4-Apr-15  |       |    | 8.74   | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 5-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 6-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 7-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 8-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 9-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 10-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 11-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 12-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 13-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 14-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 15-Apr-15 |       |    | 3.49   | 46.1              |            |                | Rp 35,315.83 | Rp 35,315.83         |
| 16-Apr-15 |       |    | 0      | 46.1              |            |                | Rp 35,315.83 | Rp 35,315.83         |
| 17-Apr-15 |       |    | 17.7   | 28.4              |            |                | Rp 21,756.39 | Rp 21,756.39         |
| 18-Apr-15 |       |    | 0.55   | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 19-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 20-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 21-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 22-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 23-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 24-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 25-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 26-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 27-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 28-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 29-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 30-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 1-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 2-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 3-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 4-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 5-May-15  |       |    | 1.56   | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 6-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 7-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 8-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 9-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 10-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 11-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 12-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 13-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 14-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 15-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 16-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 17-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 18-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 19-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 20-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 21-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 22-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 23-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 24-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 25-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 26-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 27-May-15 |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 28-May-15 |       |    | 1.77   | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 29-May-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 30-May-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 31-May-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 1-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 2-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 3-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 4-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 5-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 6-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 7-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 8-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 9-Jun-15  |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 10-Jun-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 11-Jun-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 12-Jun-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 13-Jun-15 |       |    | 0      | 24.52             |            |                | Rp 18,784.04 | Rp 18,784.04         |
| 14-Jun-15 |       |    | 1.42   | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 15-Jun-15 |       |    | 0      | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 16-Jun-15 |       |    | 0      | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 17-Jun-15 |       |    | 0      | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 18-Jun-15 |       |    | 0      | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 19-Jun-15 |       |    | 0      | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 20-Jun-15 |       |    | 0      | 23.1              |            |                | Rp 17,696.22 | Rp 17,696.22         |
| 21-Jun-15 |       |    | 3.54   | 19.56             |            |                | Rp 14,984.33 | Rp 14,984.33         |
| 22-Jun-15 |       |    | 0.46   | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 23-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 24-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 25-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 26-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 27-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 28-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 29-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 30-Jun-15 |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 1-Jul-15  |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 2-Jul-15  |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 3-Jul-15  |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 4-Jul-15  |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 5-Jul-15  |       |    | 0      | 19.1              |            |                | Rp 14,631.94 | Rp 14,631.94         |
| 6-Jul-15  |       |    | 1.1    | 18                |            |                | Rp 13,789.26 | Rp 13,789.26         |
| 7-Jul-15  |       |    | 0      | 18                |            |                | Rp 13,789.26 | Rp 13,789.26         |
| 8-Jul-15  |       |    | 0      | 18                |            |                | Rp 13,789.26 | Rp 13,789.26         |
| 9-Jul-15  |       |    | 0      | 18                |            |                | Rp 13,789.26 | Rp 13,789.26         |
| 10-Jul-15 |       |    | 2.79   | 15.21             |            |                | Rp 11,651.92 | Rp 11,651.92         |
| 11-Jul-15 |       |    | 0      | 15.21             |            |                | Rp 11,651.92 | Rp 11,651.92         |
| 12-Jul-15 |       |    | 0      | 15.21             |            |                | Rp 11,651.92 | Rp 11,651.92         |
| 13-Jul-15 |       |    | 0      | 15.21             |            |                | Rp 11,651.92 | Rp 11,651.92         |
| 14-Jul-15 |       |    | 2.08   | 13.13             |            |                | Rp 10,058.50 | Rp 10,058.50         |
| 15-Jul-15 |       |    | 0      | 13.13             |            |                | Rp 10,058.50 | Rp 10,058.50         |
| 16-Jul-15 |       |    | 0      | 13.13             |            |                | Rp 10,058.50 | Rp 10,058.50         |
| 17-Jul-15 |       |    | 0      | 13.13             |            |                | Rp 10,058.50 | Rp 10,058.50         |
| 18-Jul-15 |       |    | 1.64   | 11.49             |            |                | Rp 8,802.14  | Rp 8,802.14          |
| 19-Jul-15 |       |    | 0      | 11.49             |            |                | Rp 8,802.14  | Rp 8,802.14          |
| 20-Jul-15 |       |    | 0      | 11.49             |            |                | Rp 8,802.14  | Rp 8,802.14          |
| 21-Jul-15 |       |    | 0      | 11.49             |            |                | Rp 8,802.14  | Rp 8,802.14          |
| 22-Jul-15 |       |    | 0      | 11.49             |            |                | Rp 8,802.14  | Rp 8,802.14          |
| 23-Jul-15 |       |    | 0      | 11.49             |            |                | Rp 8,802.14  | Rp 8,802.14          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 24-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 25-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 26-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 27-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 28-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 29-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 30-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 31-Jul-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 1-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 2-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 3-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 4-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 5-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 6-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 7-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 8-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 9-Aug-15  |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 10-Aug-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 11-Aug-15 |       |       | 0      | 11.49             |               |                 | Rp 8,802.14  | Rp 8,802.14          |
| 12-Aug-15 |       |       | 3.96   | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 13-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 14-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 15-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 16-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 17-Aug-15 |       |       | 9.93   | -2.4              | Rp 131,774.28 | Rp 1,556,301.60 | Rp 5,768.51  | Rp 1,693,844.39      |
| 18-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 19-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 20-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 21-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 22-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 23-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 24-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 25-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 26-Aug-15 |       |       | 0      | 7.53              |               |                 | Rp 5,768.51  | Rp 5,768.51          |
| 27-Aug-15 | 11.63 |       | 1.12   | 6.41              |               |                 | Rp 4,910.51  | Rp 4,910.51          |
| 28-Aug-15 |       |       | 0      | 6.41              |               |                 | Rp 4,910.51  | Rp 4,910.51          |
| 29-Aug-15 |       |       | 0      | 6.41              |               |                 | Rp 4,910.51  | Rp 4,910.51          |
| 30-Aug-15 |       | 11.63 | 0      | 18.04             |               |                 | Rp 13,819.90 | Rp 13,819.90         |
| 31-Aug-15 |       |       | 0      | 18.04             |               |                 | Rp 13,819.90 | Rp 13,819.90         |
| 1-Sep-15  |       |       | 3.02   | 15.02             |               |                 | Rp 11,506.37 | Rp 11,506.37         |
| 2-Sep-15  |       |       | 0.72   | 14.3              |               |                 | Rp 10,954.80 | Rp 10,954.80         |
| 3-Sep-15  |       |       | 3.57   | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 4-Sep-15  |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 5-Sep-15  |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 6-Sep-15  |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 7-Sep-15  |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 8-Sep-15  |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 9-Sep-15  |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 10-Sep-15 |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 11-Sep-15 |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 12-Sep-15 |       |       | 0      | 10.73             |               |                 | Rp 8,219.93  | Rp 8,219.93          |
| 13-Sep-15 |       |       | 0.51   | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 14-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 15-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 16-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 17-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 18-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 19-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 20-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 21-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 22-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 23-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 24-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 25-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 26-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 27-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 28-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 29-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 30-Sep-15 |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 1-Oct-15  |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 2-Oct-15  |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 3-Oct-15  |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 4-Oct-15  |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |
| 5-Oct-15  |       |       | 0      | 10.22             |               |                 | Rp 7,829.24  | Rp 7,829.24          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 6-Oct-15  |       |       | 0      | 10.22             |               |                | Rp 7,829.24  | Rp 7,829.24          |
| 7-Oct-15  |       |       | 0      | 10.22             |               |                | Rp 7,829.24  | Rp 7,829.24          |
| 8-Oct-15  |       |       | 1.43   | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 9-Oct-15  |       |       | 0      | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 10-Oct-15 |       |       | 0      | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 11-Oct-15 |       |       | 0      | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 12-Oct-15 |       |       | 1.38   | 7.41              |               |                | Rp 5,676.58  | Rp 5,676.58          |
| 13-Oct-15 |       |       | 0      | 7.41              |               |                | Rp 5,676.58  | Rp 5,676.58          |
| 14-Oct-15 |       |       | 0      | 7.41              |               |                | Rp 5,676.58  | Rp 5,676.58          |
| 15-Oct-15 |       |       | 0      | 7.41              |               |                | Rp 5,676.58  | Rp 5,676.58          |
| 16-Oct-15 |       |       | 0      | 7.41              |               |                | Rp 5,676.58  | Rp 5,676.58          |
| 17-Oct-15 |       |       | 0      | 7.41              |               |                | Rp 5,676.58  | Rp 5,676.58          |
| 18-Oct-15 |       |       | 0.64   | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 19-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 20-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 21-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 22-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 23-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 24-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 25-Oct-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 26-Oct-15 | 11.63 |       | 1.63   | 5.14              | Rp 131,774.28 |                | Rp 3,937.60  | Rp 135,711.88        |
| 27-Oct-15 |       |       | 0      | 5.14              |               |                | Rp 3,937.60  | Rp 3,937.60          |
| 28-Oct-15 |       |       | 0      | 5.14              |               |                | Rp 3,937.60  | Rp 3,937.60          |
| 29-Oct-15 |       | 11.63 | 0      | 16.77             |               |                | Rp 12,846.99 | Rp 12,846.99         |
| 30-Oct-15 |       |       | 0      | 16.77             |               |                | Rp 12,846.99 | Rp 12,846.99         |
| 31-Oct-15 |       |       | 0      | 16.77             |               |                | Rp 12,846.99 | Rp 12,846.99         |
| 1-Nov-15  |       |       | 9.42   | 7.35              |               |                | Rp 5,630.61  | Rp 5,630.61          |
| 2-Nov-15  | 11.63 |       | 5.07   | 2.28              | Rp 131,774.28 |                | Rp 1,746.64  | Rp 133,520.92        |
| 3-Nov-15  |       |       | 0      | 2.28              |               |                | Rp 1,746.64  | Rp 1,746.64          |
| 4-Nov-15  |       | 11.63 | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 5-Nov-15  |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 6-Nov-15  |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 7-Nov-15  |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 8-Nov-15  |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 9-Nov-15  |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 10-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 11-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 12-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 13-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 14-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 15-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 16-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 17-Nov-15 |       |       | 0      | 13.91             |               |                | Rp 10,656.03 | Rp 10,656.03         |
| 18-Nov-15 |       |       | 1.74   | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 19-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 20-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 21-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 22-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 23-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 24-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 25-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 26-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 27-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 28-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 29-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 30-Nov-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 1-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 2-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 3-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 4-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 5-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 6-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 7-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 8-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 9-Dec-15  |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 10-Dec-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 11-Dec-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 12-Dec-15 |       |       | 0      | 12.17             |               |                | Rp 9,323.07  | Rp 9,323.07          |
| 13-Dec-15 |       |       | 3.67   | 8.5               |               |                | Rp 6,511.59  | Rp 6,511.59          |
| 14-Dec-15 |       |       | 0      | 8.5               |               |                | Rp 6,511.59  | Rp 6,511.59          |
| 15-Dec-15 |       |       | 0      | 8.5               |               |                | Rp 6,511.59  | Rp 6,511.59          |
| 16-Dec-15 |       |       | 0      | 8.5               |               |                | Rp 6,511.59  | Rp 6,511.59          |
| 17-Dec-15 |       |       | 0      | 8.5               |               |                | Rp 6,511.59  | Rp 6,511.59          |
| 18-Dec-15 |       |       | 0      | 8.5               |               |                | Rp 6,511.59  | Rp 6,511.59          |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 19-Dec-15 |       |    | 0      | 8.5               |            |                | Rp 6,511.59  | Rp 6,511.59          |
| 20-Dec-15 |       |    | 0      | 8.5               |            |                | Rp 6,511.59  | Rp 6,511.59          |
| 21-Dec-15 |       |    | 0      | 8.5               |            |                | Rp 6,511.59  | Rp 6,511.59          |
| 22-Dec-15 |       |    | 0      | 8.5               |            |                | Rp 6,511.59  | Rp 6,511.59          |
| 23-Dec-15 |       |    | 0      | 8.5               |            |                | Rp 6,511.59  | Rp 6,511.59          |
| 24-Dec-15 |       |    | 0      | 8.5               |            |                | Rp 6,511.59  | Rp 6,511.59          |
| 25-Dec-15 |       |    | 1.56   | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
| 26-Dec-15 |       |    | 0      | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
| 27-Dec-15 |       |    | 0      | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
| 28-Dec-15 |       |    | 0      | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
| 29-Dec-15 |       |    | 0      | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
| 30-Dec-15 |       |    | 0      | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
| 31-Dec-15 |       |    | 0      | 6.94              |            |                | Rp 5,316.53  | Rp 5,316.53          |
|           |       |    |        |                   |            |                | Rp           | 10,620,771.33        |

## Replication 4

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 1.23   | 83.52             |            |                | Rp 63,982.17 | Rp 63,982.17         |
| 8-Jan-15  |       |    | 0      | 83.52             |            |                | Rp 63,982.17 | Rp 63,982.17         |
| 9-Jan-15  |       |    | 4.9    | 78.62             |            |                | Rp 60,228.42 | Rp 60,228.42         |
| 10-Jan-15 |       |    | 0      | 78.62             |            |                | Rp 60,228.42 | Rp 60,228.42         |
| 11-Jan-15 |       |    | 1.09   | 77.53             |            |                | Rp 59,393.41 | Rp 59,393.41         |
| 12-Jan-15 |       |    | 0      | 77.53             |            |                | Rp 59,393.41 | Rp 59,393.41         |
| 13-Jan-15 |       |    | 0      | 77.53             |            |                | Rp 59,393.41 | Rp 59,393.41         |
| 14-Jan-15 |       |    | 1.91   | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 15-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 16-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 17-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 18-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 19-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 20-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 21-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 22-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 23-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 24-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 25-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 26-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 27-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 28-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 29-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 30-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 31-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 1-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 2-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 3-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 4-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 5-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 6-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 7-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 8-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 9-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 10-Feb-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 11-Feb-15 |       |    | 3.94   | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 12-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 13-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 14-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 15-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 16-Feb-15 |       |    | 9.74   | 61.94             |            |                | Rp 47,450.38 | Rp 47,450.38         |
| 17-Feb-15 |       |    | 0      | 61.94             |            |                | Rp 47,450.38 | Rp 47,450.38         |
| 18-Feb-15 |       |    | 1.86   | 60.08             |            |                | Rp 46,025.49 | Rp 46,025.49         |
| 19-Feb-15 |       |    | 0      | 60.08             |            |                | Rp 46,025.49 | Rp 46,025.49         |
| 20-Feb-15 |       |    | 0      | 60.08             |            |                | Rp 46,025.49 | Rp 46,025.49         |
| 21-Feb-15 |       |    | 1.92   | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 22-Feb-15 |       |    | 0      | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 23-Feb-15 |       |    | 0      | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 24-Feb-15 |       |    | 0      | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 25-Feb-15 |       |    | 0.41   | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 26-Feb-15 |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 27-Feb-15 |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 28-Feb-15 |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 1-Mar-15  |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 2-Mar-15  |       |    | 2.49   | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 3-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 4-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 5-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 6-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 7-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 8-Mar-15  |       |    | 0.2    | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 9-Mar-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 10-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 11-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 12-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 13-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 14-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 15-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 16-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 17-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 18-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 19-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 20-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 21-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 22-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 23-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 24-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 25-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 26-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 27-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 28-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 29-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 30-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 31-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 1-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 2-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 3-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 4-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 5-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 6-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 7-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 8-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 9-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 10-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 11-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 12-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 13-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 14-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 15-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 16-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 17-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 18-Apr-15 |       |    | 3.66   | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 19-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 20-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 21-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 22-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 23-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 24-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 25-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 26-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 27-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 28-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 29-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 30-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 1-May-15  |       |    | 1.16   | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 2-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 3-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 4-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 5-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 6-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 7-May-15  |       |       | 0      | 50.24             |               |                | Rp 38,487.36 | Rp 38,487.36         |
| 8-May-15  |       |       | 2.58   | 47.66             |               |                | Rp 36,510.90 | Rp 36,510.90         |
| 9-May-15  |       |       | 0      | 47.66             |               |                | Rp 36,510.90 | Rp 36,510.90         |
| 10-May-15 |       |       | 2.18   | 45.48             |               |                | Rp 34,840.86 | Rp 34,840.86         |
| 11-May-15 |       |       | 0      | 45.48             |               |                | Rp 34,840.86 | Rp 34,840.86         |
| 12-May-15 |       |       | 0      | 45.48             |               |                | Rp 34,840.86 | Rp 34,840.86         |
| 13-May-15 |       |       | 0.43   | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 14-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 15-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 16-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 17-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 18-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 19-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 20-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 21-May-15 |       |       | 8.42   | 36.63             |               |                | Rp 28,061.14 | Rp 28,061.14         |
| 22-May-15 |       |       | 0      | 36.63             |               |                | Rp 28,061.14 | Rp 28,061.14         |
| 23-May-15 |       |       | 1.5    | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 24-May-15 |       |       | 0      | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 25-May-15 |       |       | 0      | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 26-May-15 |       |       | 8.14   | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 27-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 28-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 29-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 30-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 31-May-15 |       |       | 1      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 1-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 2-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 3-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 4-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 5-Jun-15  |       |       | 1.78   | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 6-Jun-15  |       |       | 0      | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 7-Jun-15  |       |       | 0      | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 8-Jun-15  |       |       | 0      | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 9-Jun-15  |       |       | 1.74   | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 10-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 11-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 12-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 13-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 14-Jun-15 | 11.63 |       | 17.31  | 5.16              | Rp 131,774.28 |                | Rp 3,952.92  | Rp 135,727.20        |
| 15-Jun-15 |       |       | 0      | 5.16              |               |                | Rp 3,952.92  | Rp 3,952.92          |
| 16-Jun-15 |       | 11.63 | 0      | 16.79             |               |                | Rp 12,862.32 | Rp 12,862.32         |
| 17-Jun-15 |       |       | 0      | 16.79             |               |                | Rp 12,862.32 | Rp 12,862.32         |
| 18-Jun-15 |       |       | 1.54   | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 19-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 20-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 21-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 22-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 23-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 24-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 25-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 26-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 27-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 28-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 29-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 30-Jun-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 1-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 2-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 3-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 4-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 5-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 6-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 7-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 8-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 9-Jul-15  |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 10-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 11-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 12-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 13-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 14-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 15-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 16-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 17-Jul-15 |       |       | 0      | 15.25             |               |                | Rp 11,682.57 | Rp 11,682.57         |
| 18-Jul-15 |       |       | 2.12   | 13.13             |               |                | Rp 10,058.50 | Rp 10,058.50         |
| 19-Jul-15 |       |       | 0      | 13.13             |               |                | Rp 10,058.50 | Rp 10,058.50         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 20-Jul-15 |       |       | 0      | 13.13             |               |                 | Rp 10,058.50 | Rp 10,058.50         |
| 21-Jul-15 |       |       | 0      | 13.13             |               |                 | Rp 10,058.50 | Rp 10,058.50         |
| 22-Jul-15 |       |       | 0      | 13.13             |               |                 | Rp 10,058.50 | Rp 10,058.50         |
| 23-Jul-15 | 11.63 |       | 9.09   | 4.04              | Rp 131,774.28 |                 | Rp 3,094.92  | Rp 134,869.20        |
| 24-Jul-15 |       |       | 0      | 4.04              |               |                 | Rp 3,094.92  | Rp 3,094.92          |
| 25-Jul-15 |       |       | 0      | 4.04              |               |                 | Rp 3,094.92  | Rp 3,094.92          |
| 26-Jul-15 |       |       | 0.45   | 3.59              |               |                 | Rp 2,750.19  | Rp 2,750.19          |
| 27-Jul-15 |       |       | 0      | 3.59              |               |                 | Rp 2,750.19  | Rp 2,750.19          |
| 28-Jul-15 |       |       | 0      | 3.59              |               |                 | Rp 2,750.19  | Rp 2,750.19          |
| 29-Jul-15 |       | 11.63 | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 30-Jul-15 |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 31-Jul-15 |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 1-Aug-15  |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 2-Aug-15  |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 3-Aug-15  |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 4-Aug-15  |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 5-Aug-15  |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 6-Aug-15  |       |       | 0      | 15.22             |               |                 | Rp 11,659.59 | Rp 11,659.59         |
| 7-Aug-15  |       |       | 3.92   | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 8-Aug-15  |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 9-Aug-15  |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 10-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 11-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 12-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 13-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 14-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 15-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 16-Aug-15 |       |       | 0      | 11.3              |               |                 | Rp 8,656.59  | Rp 8,656.59          |
| 17-Aug-15 |       |       | 1.45   | 9.85              |               |                 | Rp 7,545.79  | Rp 7,545.79          |
| 18-Aug-15 |       |       | 0      | 9.85              |               |                 | Rp 7,545.79  | Rp 7,545.79          |
| 19-Aug-15 |       |       | 0      | 9.85              |               |                 | Rp 7,545.79  | Rp 7,545.79          |
| 20-Aug-15 | 11.63 |       | 3.91   | 5.94              | Rp 131,774.28 |                 | Rp 4,550.46  | Rp 136,324.74        |
| 21-Aug-15 |       |       | 9.5    | -3.56             |               | Rp 1,556,301.60 | Rp 4,550.46  | Rp 1,560,852.06      |
| 22-Aug-15 |       | 11.63 | 0      | 17.57             |               |                 | Rp 13,459.85 | Rp 13,459.85         |
| 23-Aug-15 |       |       | 0      | 17.57             |               |                 | Rp 13,459.85 | Rp 13,459.85         |
| 24-Aug-15 |       |       | 8.87   | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 25-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 26-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 27-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 28-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 29-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 30-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 31-Aug-15 |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 1-Sep-15  |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 2-Sep-15  |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 3-Sep-15  |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 4-Sep-15  |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 5-Sep-15  |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 6-Sep-15  |       |       | 0      | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |
| 7-Sep-15  |       |       | 1.04   | 7.66              |               |                 | Rp 5,868.10  | Rp 5,868.10          |
| 8-Sep-15  |       |       | 0      | 7.66              |               |                 | Rp 5,868.10  | Rp 5,868.10          |
| 9-Sep-15  |       |       | 0      | 7.66              |               |                 | Rp 5,868.10  | Rp 5,868.10          |
| 10-Sep-15 |       |       | 0      | 7.66              |               |                 | Rp 5,868.10  | Rp 5,868.10          |
| 11-Sep-15 |       |       | 0.71   | 6.95              |               |                 | Rp 5,324.19  | Rp 5,324.19          |
| 12-Sep-15 |       |       | 0      | 6.95              |               |                 | Rp 5,324.19  | Rp 5,324.19          |
| 13-Sep-15 |       |       | 0      | 6.95              |               |                 | Rp 5,324.19  | Rp 5,324.19          |
| 14-Sep-15 |       |       | 0      | 6.95              |               |                 | Rp 5,324.19  | Rp 5,324.19          |
| 15-Sep-15 | 11.63 |       | 0.71   | 6.24              | Rp 131,774.28 |                 | Rp 4,780.28  | Rp 136,554.56        |
| 16-Sep-15 |       |       | 0      | 6.24              |               |                 | Rp 4,780.28  | Rp 4,780.28          |
| 17-Sep-15 |       | 11.63 | 0      | 17.87             |               |                 | Rp 13,689.67 | Rp 13,689.67         |
| 18-Sep-15 |       |       | 0      | 17.87             |               |                 | Rp 13,689.67 | Rp 13,689.67         |
| 19-Sep-15 |       |       | 0      | 17.87             |               |                 | Rp 13,689.67 | Rp 13,689.67         |
| 20-Sep-15 |       |       | 0      | 17.87             |               |                 | Rp 13,689.67 | Rp 13,689.67         |
| 21-Sep-15 |       |       | 0      | 17.87             |               |                 | Rp 13,689.67 | Rp 13,689.67         |
| 22-Sep-15 |       |       | 0.92   | 16.95             |               |                 | Rp 12,984.89 | Rp 12,984.89         |
| 23-Sep-15 |       |       | 3.17   | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 24-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 25-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 26-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 27-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 28-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 29-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 30-Sep-15 |       |       | 0      | 13.78             |               |                 | Rp 10,556.44 | Rp 10,556.44         |
| 1-Oct-15  |       |       | 3.63   | 10.15             |               |                 | Rp 7,775.61  | Rp 7,775.61          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 2-Oct-15  |       |       | 0      | 10.15             |               |                 | Rp 7,775.61  | Rp 7,775.61          |
| 3-Oct-15  |       |       | 0      | 10.15             |               |                 | Rp 7,775.61  | Rp 7,775.61          |
| 4-Oct-15  |       |       | 2.37   | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 5-Oct-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 6-Oct-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 7-Oct-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 8-Oct-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 9-Oct-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 10-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 11-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 12-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 13-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 14-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 15-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 16-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 17-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 18-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 19-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 20-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 21-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 22-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 23-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 24-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 25-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 26-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 27-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 28-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 29-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 30-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 31-Oct-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 1-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 2-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 3-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 4-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 5-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 6-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 7-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 8-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 9-Nov-15  |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 10-Nov-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 11-Nov-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 12-Nov-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 13-Nov-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 14-Nov-15 |       |       | 0      | 7.78              |               |                 | Rp 5,960.02  | Rp 5,960.02          |
| 15-Nov-15 |       |       | 1.01   | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 16-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 17-Nov-15 |       |       | 16.38  | -9.61             |               | Rp 1,556,301.60 | Rp 5,186.29  | Rp 1,561,487.89      |
| 18-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 19-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 20-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 21-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 22-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 23-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 24-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 25-Nov-15 |       |       | 0      | 6.77              |               |                 | Rp 5,186.29  | Rp 5,186.29          |
| 26-Nov-15 | 11.63 |       | 1.05   | 5.72              | Rp 131,774.28 |                 | Rp 4,381.92  | Rp 136,156.20        |
| 27-Nov-15 |       | 11.63 | 0.61   | 16.74             |               |                 | Rp 12,824.01 | Rp 12,824.01         |
| 28-Nov-15 |       |       | 0      | 16.74             |               |                 | Rp 12,824.01 | Rp 12,824.01         |
| 29-Nov-15 |       |       | 0      | 16.74             |               |                 | Rp 12,824.01 | Rp 12,824.01         |
| 30-Nov-15 |       |       | 0      | 16.74             |               |                 | Rp 12,824.01 | Rp 12,824.01         |
| 1-Dec-15  |       |       | 0      | 16.74             |               |                 | Rp 12,824.01 | Rp 12,824.01         |
| 2-Dec-15  |       |       | 7.8    | 8.94              |               |                 | Rp 6,848.67  | Rp 6,848.67          |
| 3-Dec-15  |       |       | 0      | 8.94              |               |                 | Rp 6,848.67  | Rp 6,848.67          |
| 4-Dec-15  |       |       | 0      | 8.94              |               |                 | Rp 6,848.67  | Rp 6,848.67          |
| 5-Dec-15  |       |       | 0      | 8.94              |               |                 | Rp 6,848.67  | Rp 6,848.67          |
| 6-Dec-15  |       |       | 0      | 8.94              |               |                 | Rp 6,848.67  | Rp 6,848.67          |
| 7-Dec-15  | 11.63 |       | 8.77   | 0.17              | Rp 131,774.28 |                 | Rp 130.23    | Rp 131,904.51        |
| 8-Dec-15  |       | 11.63 | 2.78   | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |
| 9-Dec-15  |       |       | 0      | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |
| 10-Dec-15 |       |       | 0      | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |
| 11-Dec-15 |       |       | 0      | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |
| 12-Dec-15 |       |       | 0      | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |
| 13-Dec-15 |       |       | 0      | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |
| 14-Dec-15 |       |       | 0      | 9.02              |               |                 | Rp 6,909.95  | Rp 6,909.95          |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|-----------------|--------------|----------------------|
| 15-Dec-15 |       |    | 0      | 9.02              |            |                 | Rp 6,909.95  | Rp 6,909.95          |
| 16-Dec-15 |       |    | 0      | 9.02              |            |                 | Rp 6,909.95  | Rp 6,909.95          |
| 17-Dec-15 |       |    | 0      | 9.02              |            |                 | Rp 6,909.95  | Rp 6,909.95          |
| 18-Dec-15 |       |    | 0.79   | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 19-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 20-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 21-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 22-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 23-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 24-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 25-Dec-15 |       |    | 17.29  | -9.06             |            | Rp 1,556,301.60 | Rp 6,304.76  | Rp 1,562,606.36      |
| 26-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 27-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 28-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 29-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 30-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
| 31-Dec-15 |       |    | 0      | 8.23              |            |                 | Rp 6,304.76  | Rp 6,304.76          |
|           |       |    |        |                   |            |                 |              | Rp 14,194,533.42     |

## Replication 5

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 6.11   | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 4-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 5-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 6-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 7-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 8-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 9-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 10-Jan-15 |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 11-Jan-15 |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 12-Jan-15 |       |    | 8.43   | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 13-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 14-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 15-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 16-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 17-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 18-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 19-Jan-15 |       |    | 0.84   | 69.37             |            |                | Rp 53,142.28 | Rp 53,142.28         |
| 20-Jan-15 |       |    | 0      | 69.37             |            |                | Rp 53,142.28 | Rp 53,142.28         |
| 21-Jan-15 |       |    | 2.63   | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 22-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 23-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 24-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 25-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 26-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 27-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 28-Jan-15 |       |    | 18.74  | 48                |            |                | Rp 36,771.36 | Rp 36,771.36         |
| 29-Jan-15 |       |    | 0      | 48                |            |                | Rp 36,771.36 | Rp 36,771.36         |
| 30-Jan-15 |       |    | 0.27   | 47.73             |            |                | Rp 36,564.52 | Rp 36,564.52         |
| 31-Jan-15 |       |    | 0      | 47.73             |            |                | Rp 36,564.52 | Rp 36,564.52         |
| 1-Feb-15  |       |    | 1.73   | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 2-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 3-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 4-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 5-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 6-Feb-15  |       |    | 0.62   | 45.38             |            |                | Rp 34,764.26 | Rp 34,764.26         |
| 7-Feb-15  |       |    | 0      | 45.38             |            |                | Rp 34,764.26 | Rp 34,764.26         |
| 8-Feb-15  |       |    | 1.97   | 43.41             |            |                | Rp 33,255.10 | Rp 33,255.10         |
| 9-Feb-15  |       |    | 0      | 43.41             |            |                | Rp 33,255.10 | Rp 33,255.10         |
| 10-Feb-15 |       |    | 0      | 43.41             |            |                | Rp 33,255.10 | Rp 33,255.10         |
| 11-Feb-15 |       |    | 3.43   | 39.98             |            |                | Rp 30,627.48 | Rp 30,627.48         |
| 12-Feb-15 |       |    | 0      | 39.98             |            |                | Rp 30,627.48 | Rp 30,627.48         |
| 13-Feb-15 |       |    | 0      | 39.98             |            |                | Rp 30,627.48 | Rp 30,627.48         |
| 14-Feb-15 |       |    | 1.87   | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 15-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 16-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 17-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 18-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 19-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 20-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 21-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 22-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 23-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 24-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 25-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 26-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 27-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 28-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 1-Mar-15  |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 2-Mar-15  |       |    | 0.04   | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 3-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 4-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 5-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 6-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 7-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 8-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 9-Mar-15  |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 10-Mar-15 |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 11-Mar-15 |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 12-Mar-15 |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 13-Mar-15 |       |    | 0      | 38.07             |            |                | Rp 29,164.28 | Rp 29,164.28         |
| 14-Mar-15 |       |    | 3.45   | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 15-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 16-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 17-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 18-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 19-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 20-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 21-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 22-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 23-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 24-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 25-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 26-Mar-15 |       |    | 0      | 34.62             |            |                | Rp 26,521.34 | Rp 26,521.34         |
| 27-Mar-15 |       |    | 4.43   | 30.19             |            |                | Rp 23,127.65 | Rp 23,127.65         |
| 28-Mar-15 |       |    | 0      | 30.19             |            |                | Rp 23,127.65 | Rp 23,127.65         |
| 29-Mar-15 |       |    | 0      | 30.19             |            |                | Rp 23,127.65 | Rp 23,127.65         |
| 30-Mar-15 |       |    | 0      | 30.19             |            |                | Rp 23,127.65 | Rp 23,127.65         |
| 31-Mar-15 |       |    | 0      | 30.19             |            |                | Rp 23,127.65 | Rp 23,127.65         |
| 1-Apr-15  |       |    | 0      | 30.19             |            |                | Rp 23,127.65 | Rp 23,127.65         |
| 2-Apr-15  |       |    | 1.38   | 28.81             |            |                | Rp 22,070.48 | Rp 22,070.48         |
| 3-Apr-15  |       |    | 0      | 28.81             |            |                | Rp 22,070.48 | Rp 22,070.48         |
| 4-Apr-15  |       |    | 0      | 28.81             |            |                | Rp 22,070.48 | Rp 22,070.48         |
| 5-Apr-15  |       |    | 0      | 28.81             |            |                | Rp 22,070.48 | Rp 22,070.48         |
| 6-Apr-15  |       |    | 8.33   | 20.48             |            |                | Rp 15,689.11 | Rp 15,689.11         |
| 7-Apr-15  |       |    | 0      | 20.48             |            |                | Rp 15,689.11 | Rp 15,689.11         |
| 8-Apr-15  |       |    | 0      | 20.48             |            |                | Rp 15,689.11 | Rp 15,689.11         |
| 9-Apr-15  |       |    | 0      | 20.48             |            |                | Rp 15,689.11 | Rp 15,689.11         |
| 10-Apr-15 |       |    | 0      | 20.48             |            |                | Rp 15,689.11 | Rp 15,689.11         |
| 11-Apr-15 |       |    | 2.66   | 17.82             |            |                | Rp 13,651.37 | Rp 13,651.37         |
| 12-Apr-15 |       |    | 0      | 17.82             |            |                | Rp 13,651.37 | Rp 13,651.37         |
| 13-Apr-15 |       |    | 0      | 17.82             |            |                | Rp 13,651.37 | Rp 13,651.37         |
| 14-Apr-15 |       |    | 0      | 17.82             |            |                | Rp 13,651.37 | Rp 13,651.37         |
| 15-Apr-15 |       |    | 0      | 17.82             |            |                | Rp 13,651.37 | Rp 13,651.37         |
| 16-Apr-15 |       |    | 0      | 17.82             |            |                | Rp 13,651.37 | Rp 13,651.37         |
| 17-Apr-15 |       |    | 3.66   | 14.16             |            |                | Rp 10,847.55 | Rp 10,847.55         |
| 18-Apr-15 |       |    | 0      | 14.16             |            |                | Rp 10,847.55 | Rp 10,847.55         |
| 19-Apr-15 |       |    | 1.4    | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 20-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 21-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 22-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 23-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 24-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 25-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 26-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 27-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 28-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 29-Apr-15 |       |    | 0      | 12.76             |            |                | Rp 9,775.05  | Rp 9,775.05          |
| 30-Apr-15 |       |    | 1.48   | 11.28             |            |                | Rp 8,641.27  | Rp 8,641.27          |
| 1-May-15  |       |    | 0      | 11.28             |            |                | Rp 8,641.27  | Rp 8,641.27          |
| 2-May-15  |       |    | 0      | 11.28             |            |                | Rp 8,641.27  | Rp 8,641.27          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 3-May-15  |       |       | 0      | 11.28             |               |                | Rp 8,641.27  | Rp 8,641.27          |
| 4-May-15  |       |       | 0      | 11.28             |               |                | Rp 8,641.27  | Rp 8,641.27          |
| 5-May-15  |       |       | 0      | 11.28             |               |                | Rp 8,641.27  | Rp 8,641.27          |
| 6-May-15  |       |       | 0      | 11.28             |               |                | Rp 8,641.27  | Rp 8,641.27          |
| 7-May-15  |       |       | 1.11   | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 8-May-15  |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 9-May-15  |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 10-May-15 |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 11-May-15 |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 12-May-15 |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 13-May-15 |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 14-May-15 |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 15-May-15 |       |       | 0      | 10.17             |               |                | Rp 7,790.93  | Rp 7,790.93          |
| 16-May-15 |       |       | 1.92   | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 17-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 18-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 19-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 20-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 21-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 22-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 23-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 24-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 25-May-15 |       |       | 0      | 8.25              |               |                | Rp 6,320.08  | Rp 6,320.08          |
| 26-May-15 | 11.63 |       | 1.89   | 6.36              | Rp 131,774.28 |                | Rp 4,872.21  | Rp 136,646.49        |
| 27-May-15 |       |       | 2.07   | 4.29              |               |                | Rp 3,286.44  | Rp 3,286.44          |
| 28-May-15 |       | 11.63 | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 29-May-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 30-May-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 31-May-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 1-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 2-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 3-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 4-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 5-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 6-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 7-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 8-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 9-Jun-15  |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 10-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 11-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 12-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 13-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 14-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 15-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 16-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 17-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 18-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 19-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 20-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 21-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 22-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 23-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 24-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 25-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 26-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 27-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 28-Jun-15 |       |       | 0      | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 29-Jun-15 |       |       | 4.15   | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 30-Jun-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 1-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 2-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 3-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 4-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 5-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 6-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 7-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 8-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 9-Jul-15  |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 10-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 11-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 12-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 13-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 14-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 15-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 16-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 17-Jul-15 |       |       | 0      | 11.77             |               |                | Rp 9,016.64  | Rp 9,016.64          |
| 18-Jul-15 |       |       | 3.3    | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 19-Jul-15 |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 20-Jul-15 |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 21-Jul-15 |       |       | 0      | 8.47              |               |                | Rp 6,488.61  | Rp 6,488.61          |
| 22-Jul-15 |       |       | 0.46   | 8.01              |               |                | Rp 6,136.22  | Rp 6,136.22          |
| 23-Jul-15 |       |       | 0      | 8.01              |               |                | Rp 6,136.22  | Rp 6,136.22          |
| 24-Jul-15 | 11.63 |       | 3.58   | 4.43              | Rp 131,774.28 |                | Rp 3,393.69  | Rp 135,167.97        |
| 25-Jul-15 |       |       | 0      | 4.43              |               |                | Rp 3,393.69  | Rp 3,393.69          |
| 26-Jul-15 |       |       | 0      | 4.43              |               |                | Rp 3,393.69  | Rp 3,393.69          |
| 27-Jul-15 |       | 11.63 | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 28-Jul-15 |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 29-Jul-15 |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 30-Jul-15 |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 31-Jul-15 |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 1-Aug-15  |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 2-Aug-15  |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 3-Aug-15  |       |       | 0      | 16.06             |               |                | Rp 12,303.08 | Rp 12,303.08         |
| 4-Aug-15  |       |       | 6.63   | 9.43              |               |                | Rp 7,224.04  | Rp 7,224.04          |
| 5-Aug-15  |       |       | 0      | 9.43              |               |                | Rp 7,224.04  | Rp 7,224.04          |
| 6-Aug-15  |       |       | 0      | 9.43              |               |                | Rp 7,224.04  | Rp 7,224.04          |
| 7-Aug-15  |       |       | 0      | 9.43              |               |                | Rp 7,224.04  | Rp 7,224.04          |
| 8-Aug-15  |       |       | 0      | 9.43              |               |                | Rp 7,224.04  | Rp 7,224.04          |
| 9-Aug-15  |       |       | 0.64   | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 10-Aug-15 |       |       | 0      | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 11-Aug-15 |       |       | 0      | 8.79              |               |                | Rp 6,733.76  | Rp 6,733.76          |
| 12-Aug-15 | 11.63 |       | 3.96   | 4.83              | Rp 131,774.28 |                | Rp 3,700.12  | Rp 135,474.40        |
| 13-Aug-15 |       |       | 0      | 4.83              |               |                | Rp 3,700.12  | Rp 3,700.12          |
| 14-Aug-15 |       |       | 0      | 4.83              |               |                | Rp 3,700.12  | Rp 3,700.12          |
| 15-Aug-15 |       | 11.63 | 0.54   | 15.92             |               |                | Rp 12,195.83 | Rp 12,195.83         |
| 16-Aug-15 |       |       | 0.68   | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 17-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 18-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 19-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 20-Aug-15 | 11.63 |       | 9.41   | 5.83              | Rp 131,774.28 |                | Rp 4,466.19  | Rp 136,240.47        |
| 21-Aug-15 |       |       | 0      | 5.83              |               |                | Rp 4,466.19  | Rp 4,466.19          |
| 22-Aug-15 |       | 11.63 | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 23-Aug-15 |       |       | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 24-Aug-15 |       |       | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 25-Aug-15 |       |       | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 26-Aug-15 |       |       | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 27-Aug-15 |       |       | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 28-Aug-15 |       |       | 0      | 17.46             |               |                | Rp 13,375.58 | Rp 13,375.58         |
| 29-Aug-15 |       |       | 0.21   | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 30-Aug-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 31-Aug-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 1-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 2-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 3-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 4-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 5-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 6-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 7-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 8-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 9-Sep-15  |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 10-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 11-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 12-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 13-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 14-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 15-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 16-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 17-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 18-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 19-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 20-Sep-15 |       |       | 0      | 17.25             |               |                | Rp 13,214.71 | Rp 13,214.71         |
| 21-Sep-15 |       |       | 0.37   | 16.88             |               |                | Rp 12,931.26 | Rp 12,931.26         |
| 22-Sep-15 |       |       | 0      | 16.88             |               |                | Rp 12,931.26 | Rp 12,931.26         |
| 23-Sep-15 |       |       | 0      | 16.88             |               |                | Rp 12,931.26 | Rp 12,931.26         |
| 24-Sep-15 |       |       | 7.58   | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 25-Sep-15 |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 26-Sep-15 |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 27-Sep-15 |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 28-Sep-15 |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 29-Sep-15 |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 30-Sep-15 |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 1-Oct-15  |       |       | 0      | 9.3               |               |                | Rp 7,124.45  | Rp 7,124.45          |
| 2-Oct-15  |       |       | 1.13   | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 3-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 4-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 5-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 6-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 7-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 8-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 9-Oct-15  |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 10-Oct-15 |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 11-Oct-15 |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 12-Oct-15 |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 13-Oct-15 |       |       | 0      | 8.17              |               |                | Rp 6,258.79  | Rp 6,258.79          |
| 14-Oct-15 | 11.63 |       | 3.27   | 4.9               | Rp 131,774.28 |                | Rp 3,753.74  | Rp 135,528.02        |
| 15-Oct-15 |       |       | 0      | 4.9               |               |                | Rp 3,753.74  | Rp 3,753.74          |
| 16-Oct-15 |       | 11.63 | 0      | 16.53             |               |                | Rp 12,663.14 | Rp 12,663.14         |
| 17-Oct-15 |       |       | 0      | 16.53             |               |                | Rp 12,663.14 | Rp 12,663.14         |
| 18-Oct-15 |       |       | 9.93   | 6.6               |               |                | Rp 5,056.06  | Rp 5,056.06          |
| 19-Oct-15 |       |       | 0      | 6.6               |               |                | Rp 5,056.06  | Rp 5,056.06          |
| 20-Oct-15 |       |       | 0      | 6.6               |               |                | Rp 5,056.06  | Rp 5,056.06          |
| 21-Oct-15 |       |       | 0      | 6.6               |               |                | Rp 5,056.06  | Rp 5,056.06          |
| 22-Oct-15 |       |       | 0      | 6.6               |               |                | Rp 5,056.06  | Rp 5,056.06          |
| 23-Oct-15 |       |       | 0      | 6.6               |               |                | Rp 5,056.06  | Rp 5,056.06          |
| 24-Oct-15 | 11.63 |       | 0.39   | 6.21              | Rp 131,774.28 |                | Rp 4,757.29  | Rp 136,531.57        |
| 25-Oct-15 |       |       | 0      | 6.21              |               |                | Rp 4,757.29  | Rp 4,757.29          |
| 26-Oct-15 |       | 11.63 | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 27-Oct-15 |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 28-Oct-15 |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 29-Oct-15 |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 30-Oct-15 |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 31-Oct-15 |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 1-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 2-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 3-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 4-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 5-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 6-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 7-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 8-Nov-15  |       |       | 0      | 17.84             |               |                | Rp 13,666.69 | Rp 13,666.69         |
| 9-Nov-15  |       |       | 0.44   | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 10-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 11-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 12-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 13-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 14-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 15-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 16-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 17-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 18-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 19-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 20-Nov-15 |       |       | 0      | 17.4              |               |                | Rp 13,329.62 | Rp 13,329.62         |
| 21-Nov-15 |       |       | 0.94   | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 22-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 23-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 24-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 25-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 26-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 27-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 28-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 29-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 30-Nov-15 |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 1-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 2-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 3-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 4-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 5-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 6-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 7-Dec-15  |       |       | 0      | 16.46             |               |                | Rp 12,609.51 | Rp 12,609.51         |
| 8-Dec-15  |       |       | 5.03   | 11.43             |               |                | Rp 8,756.18  | Rp 8,756.18          |
| 9-Dec-15  |       |       | 0      | 11.43             |               |                | Rp 8,756.18  | Rp 8,756.18          |
| 10-Dec-15 |       |       | 0      | 11.43             |               |                | Rp 8,756.18  | Rp 8,756.18          |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost    | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|-----------------|----------------------|
| 11-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 12-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 13-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 14-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 15-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 16-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 17-Dec-15 |       |    | 0      | 11.43             |            |                | Rp 8,756.18     | Rp 8,756.18          |
| 18-Dec-15 |       |    | 1.09   | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 19-Dec-15 |       |    | 0      | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 20-Dec-15 |       |    | 0      | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 21-Dec-15 |       |    | 0      | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 22-Dec-15 |       |    | 0      | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 23-Dec-15 |       |    | 0      | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 24-Dec-15 |       |    | 0      | 10.34             |            |                | Rp 7,921.16     | Rp 7,921.16          |
| 25-Dec-15 |       |    | 0.02   | 10.32             |            |                | Rp 7,905.84     | Rp 7,905.84          |
| 26-Dec-15 |       |    | 0.64   | 9.68              |            |                | Rp 7,415.56     | Rp 7,415.56          |
| 27-Dec-15 |       |    | 0      | 9.68              |            |                | Rp 7,415.56     | Rp 7,415.56          |
| 28-Dec-15 |       |    | 2.58   | 7.1               |            |                | Rp 5,439.10     | Rp 5,439.10          |
| 29-Dec-15 |       |    | 0      | 7.1               |            |                | Rp 5,439.10     | Rp 5,439.10          |
| 30-Dec-15 |       |    | 0      | 7.1               |            |                | Rp 5,439.10     | Rp 5,439.10          |
| 31-Dec-15 |       |    | 0      | 7.1               |            |                | Rp 5,439.10     | Rp 5,439.10          |
|           |       |    |        |                   |            |                | Rp 7,070,757.31 |                      |

## Replication 6

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 10-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 11-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 12-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 13-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 14-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 15-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 16-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 17-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 18-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 19-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 20-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 21-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 22-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 23-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 24-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 25-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 26-Jan-15 |       |    | 2.6    | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 27-Jan-15 |       |    | 0      | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 28-Jan-15 |       |    | 0      | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 29-Jan-15 |       |    | 0      | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 30-Jan-15 |       |    | 10.95  | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 31-Jan-15 |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 1-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 2-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 3-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 4-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 5-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 6-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 7-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 8-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 9-Feb-15  |       |    | 0.03   | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 10-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 11-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 12-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 13-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 14-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 15-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 16-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 17-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 18-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 19-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 20-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 21-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 22-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 23-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 24-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 25-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 26-Feb-15 |       |    | 1.27   | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 27-Feb-15 |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 28-Feb-15 |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 1-Mar-15  |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 2-Mar-15  |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 3-Mar-15  |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 4-Mar-15  |       |    | 8.42   | 61.48             |            |                | Rp 47,097.98 | Rp 47,097.98         |
| 5-Mar-15  |       |    | 0      | 61.48             |            |                | Rp 47,097.98 | Rp 47,097.98         |
| 6-Mar-15  |       |    | 0      | 61.48             |            |                | Rp 47,097.98 | Rp 47,097.98         |
| 7-Mar-15  |       |    | 7.92   | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 8-Mar-15  |       |    | 0      | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 9-Mar-15  |       |    | 0      | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 10-Mar-15 |       |    | 0      | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 11-Mar-15 |       |    | 0.36   | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 12-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 13-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 14-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 15-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 16-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 17-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 18-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 19-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 20-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 21-Mar-15 |       |    | 2.67   | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 22-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 23-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 24-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 25-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 26-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 27-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 28-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 29-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 30-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 31-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 1-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 2-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 3-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 4-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 5-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 6-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 7-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 8-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 9-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 10-Apr-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 11-Apr-15 |       |    | 1.09   | 49.44             |            |                | Rp 37,874.50 | Rp 37,874.50         |
| 12-Apr-15 |       |    | 0      | 49.44             |            |                | Rp 37,874.50 | Rp 37,874.50         |
| 13-Apr-15 |       |    | 0.13   | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 14-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 15-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 16-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 17-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 18-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 19-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 20-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 21-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 22-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 23-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 24-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 25-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 26-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 27-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 28-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|-----------------|--------------|----------------------|
| 29-Apr-15 |       |    | 0      | 49.31             |            |                 | Rp 37,774.91 | Rp 37,774.91         |
| 30-Apr-15 |       |    | 0      | 49.31             |            |                 | Rp 37,774.91 | Rp 37,774.91         |
| 1-May-15  |       |    | 1.07   | 48.24             |            |                 | Rp 36,955.22 | Rp 36,955.22         |
| 2-May-15  |       |    | 0      | 48.24             |            |                 | Rp 36,955.22 | Rp 36,955.22         |
| 3-May-15  |       |    | 0      | 48.24             |            |                 | Rp 36,955.22 | Rp 36,955.22         |
| 4-May-15  |       |    | 1.77   | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 5-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 6-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 7-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 8-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 9-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 10-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 11-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 12-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 13-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 14-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 15-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 16-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 17-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 18-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 19-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 20-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 21-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 22-May-15 |       |    | 1.6    | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 23-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 24-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 25-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 26-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 27-May-15 |       |    | 3.34   | 41.53             |            |                 | Rp 31,814.89 | Rp 31,814.89         |
| 28-May-15 |       |    | 0      | 41.53             |            |                 | Rp 31,814.89 | Rp 31,814.89         |
| 29-May-15 |       |    | 0.97   | 40.56             |            |                 | Rp 31,071.80 | Rp 31,071.80         |
| 30-May-15 |       |    | 0      | 40.56             |            |                 | Rp 31,071.80 | Rp 31,071.80         |
| 31-May-15 |       |    | 1.77   | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 1-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 2-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 3-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 4-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 5-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 6-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 7-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 8-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 9-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 10-Jun-15 |       |    | 0.9    | 37.89             |            |                 | Rp 29,026.39 | Rp 29,026.39         |
| 11-Jun-15 |       |    | 0      | 37.89             |            |                 | Rp 29,026.39 | Rp 29,026.39         |
| 12-Jun-15 |       |    | 0      | 37.89             |            |                 | Rp 29,026.39 | Rp 29,026.39         |
| 13-Jun-15 |       |    | 1.17   | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 14-Jun-15 |       |    | 0      | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 15-Jun-15 |       |    | 0      | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 16-Jun-15 |       |    | 0      | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 17-Jun-15 |       |    | 18.9   | 17.82             |            |                 | Rp 13,651.37 | Rp 13,651.37         |
| 18-Jun-15 |       |    | 2.05   | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 19-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 20-Jun-15 |       |    | 19.77  | -4                |            | Rp 1,556,301.60 | Rp 12,080.92 | Rp 1,568,382.52      |
| 21-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 22-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 23-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 24-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 25-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 26-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 27-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 28-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 29-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 30-Jun-15 |       |    | 17.67  | -1.9              |            | Rp 1,556,301.60 | Rp 12,080.92 | Rp 1,568,382.52      |
| 1-Jul-15  |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 2-Jul-15  |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 3-Jul-15  |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 4-Jul-15  |       |    | 2.82   | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 5-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 6-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 7-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 8-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 9-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 10-Jul-15 |       |    | 0.46   | 12.49             |            |                 | Rp 9,568.21  | Rp 9,568.21          |
| 11-Jul-15 |       |    | 0      | 12.49             |            |                 | Rp 9,568.21  | Rp 9,568.21          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 12-Jul-15 |       |       | 0      | 12.49             |               |                | Rp 9,568.21  | Rp 9,568.21          |
| 13-Jul-15 |       |       | 0.41   | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 14-Jul-15 |       |       | 0      | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 15-Jul-15 |       |       | 0      | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 16-Jul-15 |       |       | 0      | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 17-Jul-15 |       |       | 0      | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 18-Jul-15 |       |       | 3.59   | 8.49              |               |                | Rp 6,503.93  | Rp 6,503.93          |
| 19-Jul-15 |       |       | 0      | 8.49              |               |                | Rp 6,503.93  | Rp 6,503.93          |
| 20-Jul-15 |       |       | 0      | 8.49              |               |                | Rp 6,503.93  | Rp 6,503.93          |
| 21-Jul-15 |       |       | 0      | 8.49              |               |                | Rp 6,503.93  | Rp 6,503.93          |
| 22-Jul-15 |       |       | 0.03   | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 23-Jul-15 |       |       | 0      | 8.46              |               |                | Rp 6,480.95  | Rp 6,480.95          |
| 24-Jul-15 | 11.63 |       | 3.99   | 4.47              | Rp 131,774.28 |                | Rp 3,424.33  | Rp 135,198.61        |
| 25-Jul-15 |       |       | 0      | 4.47              |               |                | Rp 3,424.33  | Rp 3,424.33          |
| 26-Jul-15 |       |       | 0      | 4.47              |               |                | Rp 3,424.33  | Rp 3,424.33          |
| 27-Jul-15 |       | 11.63 | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 28-Jul-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 29-Jul-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 30-Jul-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 31-Jul-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 1-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 2-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 3-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 4-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 5-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 6-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 7-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 8-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 9-Aug-15  |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 10-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 11-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 12-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 13-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 14-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 15-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 16-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 17-Aug-15 |       |       | 0      | 16.1              |               |                | Rp 12,333.73 | Rp 12,333.73         |
| 18-Aug-15 |       |       | 6.58   | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 19-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 20-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 21-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 22-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 23-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 24-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 25-Aug-15 |       |       | 0      | 9.52              |               |                | Rp 7,292.99  | Rp 7,292.99          |
| 26-Aug-15 |       |       | 1.3    | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 27-Aug-15 |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 28-Aug-15 |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 29-Aug-15 |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 30-Aug-15 |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 31-Aug-15 |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 1-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 2-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 3-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 4-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 5-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 6-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 7-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 8-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 9-Sep-15  |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 10-Sep-15 |       |       | 0      | 8.22              |               |                | Rp 6,297.10  | Rp 6,297.10          |
| 11-Sep-15 | 11.63 |       | 1.94   | 6.28              | Rp 131,774.28 |                | Rp 4,810.92  | Rp 136,585.20        |
| 12-Sep-15 |       |       | 0      | 6.28              |               |                | Rp 4,810.92  | Rp 4,810.92          |
| 13-Sep-15 |       |       | 0      | 6.28              |               |                | Rp 4,810.92  | Rp 4,810.92          |
| 14-Sep-15 |       | 11.63 | 0      | 17.91             |               |                | Rp 13,720.31 | Rp 13,720.31         |
| 15-Sep-15 |       |       | 0      | 17.91             |               |                | Rp 13,720.31 | Rp 13,720.31         |
| 16-Sep-15 |       |       | 0      | 17.91             |               |                | Rp 13,720.31 | Rp 13,720.31         |
| 17-Sep-15 |       |       | 3.83   | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 18-Sep-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 19-Sep-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 20-Sep-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 21-Sep-15 |       |       | 2.2    | 11.88             |               |                | Rp 9,100.91  | Rp 9,100.91          |
| 22-Sep-15 |       |       | 0      | 11.88             |               |                | Rp 9,100.91  | Rp 9,100.91          |
| 23-Sep-15 |       |       | 0      | 11.88             |               |                | Rp 9,100.91  | Rp 9,100.91          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 24-Sep-15 |       |       | 0      | 11.88             |               |                 | Rp 9,100.91  | Rp 9,100.91          |
| 25-Sep-15 |       |       | 1.53   | 10.35             |               |                 | Rp 7,928.82  | Rp 7,928.82          |
| 26-Sep-15 |       |       | 0      | 10.35             |               |                 | Rp 7,928.82  | Rp 7,928.82          |
| 27-Sep-15 |       |       | 0      | 10.35             |               |                 | Rp 7,928.82  | Rp 7,928.82          |
| 28-Sep-15 |       |       | 0      | 10.35             |               |                 | Rp 7,928.82  | Rp 7,928.82          |
| 29-Sep-15 |       |       | 0      | 10.35             |               |                 | Rp 7,928.82  | Rp 7,928.82          |
| 30-Sep-15 |       |       | 1.55   | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 1-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 2-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 3-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 4-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 5-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 6-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 7-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 8-Oct-15  |       |       | 0      | 8.8               |               |                 | Rp 6,741.42  | Rp 6,741.42          |
| 9-Oct-15  | 11.63 |       | 3.62   | 5.18              | Rp 131,774.28 |                 | Rp 3,968.24  | Rp 135,742.52        |
| 10-Oct-15 |       |       | 0      | 5.18              |               |                 | Rp 3,968.24  | Rp 3,968.24          |
| 11-Oct-15 |       |       | 0      | 5.18              |               |                 | Rp 3,968.24  | Rp 3,968.24          |
| 12-Oct-15 |       | 11.63 | 0      | 16.81             |               |                 | Rp 12,877.64 | Rp 12,877.64         |
| 13-Oct-15 |       |       | 1.95   | 14.86             |               |                 | Rp 11,383.80 | Rp 11,383.80         |
| 14-Oct-15 |       |       | 0      | 14.86             |               |                 | Rp 11,383.80 | Rp 11,383.80         |
| 15-Oct-15 |       |       | 0      | 14.86             |               |                 | Rp 11,383.80 | Rp 11,383.80         |
| 16-Oct-15 |       |       | 0      | 14.86             |               |                 | Rp 11,383.80 | Rp 11,383.80         |
| 17-Oct-15 |       |       | 0      | 14.86             |               |                 | Rp 11,383.80 | Rp 11,383.80         |
| 18-Oct-15 |       |       | 0      | 14.86             |               |                 | Rp 11,383.80 | Rp 11,383.80         |
| 19-Oct-15 |       |       | 3.59   | 11.27             |               |                 | Rp 8,633.61  | Rp 8,633.61          |
| 20-Oct-15 |       |       | 0      | 11.27             |               |                 | Rp 8,633.61  | Rp 8,633.61          |
| 21-Oct-15 |       |       | 2.92   | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 22-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 23-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 24-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 25-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 26-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 27-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 28-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 29-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 30-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 31-Oct-15 |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 1-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 2-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 3-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 4-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 5-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 6-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 7-Nov-15  |       |       | 0      | 8.35              |               |                 | Rp 6,396.68  | Rp 6,396.68          |
| 8-Nov-15  |       |       | 0.38   | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 9-Nov-15  |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 10-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 11-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 12-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 13-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 14-Nov-15 |       |       | 8.56   | -0.59             |               | Rp 1,556,301.60 | Rp 6,105.58  | Rp 1,562,407.18      |
| 15-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 16-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 17-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 18-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 19-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 20-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 21-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 22-Nov-15 |       |       | 0      | 7.97              |               |                 | Rp 6,105.58  | Rp 6,105.58          |
| 23-Nov-15 |       |       | 1.11   | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 24-Nov-15 |       |       | 0      | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 25-Nov-15 |       |       | 0      | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 26-Nov-15 |       |       | 0      | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 27-Nov-15 |       |       | 0      | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 28-Nov-15 |       |       | 0      | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 29-Nov-15 |       |       | 0      | 6.86              |               |                 | Rp 5,255.24  | Rp 5,255.24          |
| 30-Nov-15 |       |       | 0.8    | 6.06              |               |                 | Rp 4,642.38  | Rp 4,642.38          |
| 1-Dec-15  | 11.63 |       | 4.35   | 1.71              | Rp 131,774.28 |                 | Rp 1,309.98  | Rp 133,084.26        |
| 2-Dec-15  |       |       | 0      | 1.71              |               |                 | Rp 1,309.98  | Rp 1,309.98          |
| 3-Dec-15  |       | 11.63 | 0      | 13.34             |               |                 | Rp 10,219.37 | Rp 10,219.37         |
| 4-Dec-15  |       |       | 0      | 13.34             |               |                 | Rp 10,219.37 | Rp 10,219.37         |
| 5-Dec-15  |       |       | 0      | 13.34             |               |                 | Rp 10,219.37 | Rp 10,219.37         |
| 6-Dec-15  |       |       | 4.64   | 8.7               |               |                 | Rp 6,664.81  | Rp 6,664.81          |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|-----------------|--------------|----------------------|
| 7-Dec-15  |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 8-Dec-15  |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 9-Dec-15  |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 10-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 11-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 12-Dec-15 |       |    | 9.66   | -0.96             |            | Rp 1,556,301.60 | Rp 6,664.81  | Rp 1,562,966.41      |
| 13-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 14-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 15-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 16-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 17-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 18-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 19-Dec-15 |       |    | 0      | 8.7               |            |                 | Rp 6,664.81  | Rp 6,664.81          |
| 20-Dec-15 |       |    | 1.9    | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 21-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 22-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 23-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 24-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 25-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 26-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 27-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 28-Dec-15 |       |    | 9.97   | -3.17             |            | Rp 1,556,301.60 | Rp 5,209.28  | Rp 1,561,510.88      |
| 29-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 30-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
| 31-Dec-15 |       |    | 0      | 6.8               |            |                 | Rp 5,209.28  | Rp 5,209.28          |
|           |       |    |        |                   |            |                 |              | Rp 17,473,774.67     |

## Replication 7

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |    | 0.03   | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 9-Jan-15  |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 10-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 11-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 12-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 13-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 14-Jan-15 |       |    | 1.71   | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 15-Jan-15 |       |    | 0      | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 16-Jan-15 |       |    | 0      | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 17-Jan-15 |       |    | 0      | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 18-Jan-15 |       |    | 0.12   | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 19-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 20-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 21-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 22-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 23-Jan-15 |       |    | 0.6    | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 24-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 25-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 26-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 27-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 28-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 29-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 30-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 31-Jan-15 |       |    | 0.89   | 81.4              |            |                | Rp 62,358.10 | Rp 62,358.10         |
| 1-Feb-15  |       |    | 0      | 81.4              |            |                | Rp 62,358.10 | Rp 62,358.10         |
| 2-Feb-15  |       |    | 0.18   | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 3-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 4-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 5-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 6-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 7-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 8-Feb-15  |       |    | 18.85  | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 9-Feb-15  |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 10-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 11-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 12-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 13-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 14-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 15-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 16-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 17-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 18-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 19-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 20-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 21-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 22-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 23-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 24-Feb-15 |       |    | 0.77   | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 25-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 26-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 27-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 28-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 1-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 2-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 3-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 4-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 5-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 6-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 7-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 8-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 9-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 10-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 11-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 12-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 13-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 14-Mar-15 |       |    | 1.31   | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 15-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 16-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 17-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 18-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 19-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 20-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 21-Mar-15 |       |    | 0.69   | 59.6              |            |                | Rp 45,657.77 | Rp 45,657.77         |
| 22-Mar-15 |       |    | 0      | 59.6              |            |                | Rp 45,657.77 | Rp 45,657.77         |
| 23-Mar-15 |       |    | 0      | 59.6              |            |                | Rp 45,657.77 | Rp 45,657.77         |
| 24-Mar-15 |       |    | 0.87   | 58.73             |            |                | Rp 44,991.29 | Rp 44,991.29         |
| 25-Mar-15 |       |    | 0      | 58.73             |            |                | Rp 44,991.29 | Rp 44,991.29         |
| 26-Mar-15 |       |    | 0.08   | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 27-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 28-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 29-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 30-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 31-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 1-Apr-15  |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 2-Apr-15  |       |    | 0.75   | 57.9              |            |                | Rp 44,355.45 | Rp 44,355.45         |
| 3-Apr-15  |       |    | 1.88   | 56.02             |            |                | Rp 42,915.24 | Rp 42,915.24         |
| 4-Apr-15  |       |    | 0      | 56.02             |            |                | Rp 42,915.24 | Rp 42,915.24         |
| 5-Apr-15  |       |    | 0      | 56.02             |            |                | Rp 42,915.24 | Rp 42,915.24         |
| 6-Apr-15  |       |    | 2.48   | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 7-Apr-15  |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 8-Apr-15  |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 9-Apr-15  |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 10-Apr-15 |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 11-Apr-15 |       |    | 19.99  | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 12-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 13-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 14-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 15-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 16-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 17-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 18-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 19-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 20-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 21-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 22-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 23-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 24-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 25-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 26-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 27-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 28-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 29-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 30-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 1-May-15  |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 2-May-15  |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 3-May-15  |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 4-May-15  |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 5-May-15  |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 6-May-15  |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 7-May-15  |       |    | 0.83   | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 8-May-15  |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 9-May-15  |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 10-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 11-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 12-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 13-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 14-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 15-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 16-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 17-May-15 |       |    | 0      | 32.72             |            |                | Rp 25,065.81 | Rp 25,065.81         |
| 18-May-15 |       |    | 1.23   | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 19-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 20-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 21-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 22-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 23-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 24-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 25-May-15 |       |    | 0      | 31.49             |            |                | Rp 24,123.54 | Rp 24,123.54         |
| 26-May-15 |       |    | 1.05   | 30.44             |            |                | Rp 23,319.17 | Rp 23,319.17         |
| 27-May-15 |       |    | 0      | 30.44             |            |                | Rp 23,319.17 | Rp 23,319.17         |
| 28-May-15 |       |    | 0      | 30.44             |            |                | Rp 23,319.17 | Rp 23,319.17         |
| 29-May-15 |       |    | 0.45   | 29.99             |            |                | Rp 22,974.44 | Rp 22,974.44         |
| 30-May-15 |       |    | 0      | 29.99             |            |                | Rp 22,974.44 | Rp 22,974.44         |
| 31-May-15 |       |    | 0      | 29.99             |            |                | Rp 22,974.44 | Rp 22,974.44         |
| 1-Jun-15  |       |    | 0      | 29.99             |            |                | Rp 22,974.44 | Rp 22,974.44         |
| 2-Jun-15  |       |    | 0      | 29.99             |            |                | Rp 22,974.44 | Rp 22,974.44         |
| 3-Jun-15  |       |    | 3.44   | 26.55             |            |                | Rp 20,339.16 | Rp 20,339.16         |
| 4-Jun-15  |       |    | 0      | 26.55             |            |                | Rp 20,339.16 | Rp 20,339.16         |
| 5-Jun-15  |       |    | 3.11   | 23.44             |            |                | Rp 17,956.68 | Rp 17,956.68         |
| 6-Jun-15  |       |    | 0      | 23.44             |            |                | Rp 17,956.68 | Rp 17,956.68         |
| 7-Jun-15  |       |    | 0      | 23.44             |            |                | Rp 17,956.68 | Rp 17,956.68         |
| 8-Jun-15  |       |    | 0.84   | 22.6              |            |                | Rp 17,313.18 | Rp 17,313.18         |
| 9-Jun-15  |       |    | 0      | 22.6              |            |                | Rp 17,313.18 | Rp 17,313.18         |
| 10-Jun-15 |       |    | 0      | 22.6              |            |                | Rp 17,313.18 | Rp 17,313.18         |
| 11-Jun-15 |       |    | 0      | 22.6              |            |                | Rp 17,313.18 | Rp 17,313.18         |
| 12-Jun-15 |       |    | 0      | 22.6              |            |                | Rp 17,313.18 | Rp 17,313.18         |
| 13-Jun-15 |       |    | 3.77   | 18.83             |            |                | Rp 14,425.10 | Rp 14,425.10         |
| 14-Jun-15 |       |    | 9.44   | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 15-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 16-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 17-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 18-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 19-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 20-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 21-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 22-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 23-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 24-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 25-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 26-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 27-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 28-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 29-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 30-Jun-15 |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 1-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 2-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 3-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 4-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 5-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 6-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |
| 7-Jul-15  |       |    | 0      | 9.39              |            |                | Rp 7,193.40  | Rp 7,193.40          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 8-Jul-15  |       |       | 0.67   | 8.72              |               |                 | Rp 6,680.13  | Rp 6,680.13          |
| 9-Jul-15  |       |       | 0      | 8.72              |               |                 | Rp 6,680.13  | Rp 6,680.13          |
| 10-Jul-15 |       |       | 1.52   | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 11-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 12-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 13-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 14-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 15-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 16-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 17-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 18-Jul-15 |       |       | 0      | 7.2               |               |                 | Rp 5,515.70  | Rp 5,515.70          |
| 19-Jul-15 |       |       | 9.74   | -2.54             |               | Rp 1,556,301.60 | Rp 5,515.70  | Rp 1,561,817.30      |
| 20-Jul-15 | 11.63 |       | 0.75   | 6.45              | Rp 131,774.28 |                 | Rp 4,941.15  | Rp 136,715.43        |
| 21-Jul-15 |       |       | 0      | 6.45              |               |                 | Rp 4,941.15  | Rp 4,941.15          |
| 22-Jul-15 |       | 11.63 | 0      | 18.08             |               |                 | Rp 13,850.55 | Rp 13,850.55         |
| 23-Jul-15 |       |       | 0      | 18.08             |               |                 | Rp 13,850.55 | Rp 13,850.55         |
| 24-Jul-15 |       |       | 0      | 18.08             |               |                 | Rp 13,850.55 | Rp 13,850.55         |
| 25-Jul-15 |       |       | 0      | 18.08             |               |                 | Rp 13,850.55 | Rp 13,850.55         |
| 26-Jul-15 |       |       | 0      | 18.08             |               |                 | Rp 13,850.55 | Rp 13,850.55         |
| 27-Jul-15 |       |       | 2.17   | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 28-Jul-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 29-Jul-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 30-Jul-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 31-Jul-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 1-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 2-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 3-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 4-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 5-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 6-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 7-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 8-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 9-Aug-15  |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 10-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 11-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 12-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 13-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 14-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 15-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 16-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 17-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 18-Aug-15 |       |       | 0      | 15.91             |               |                 | Rp 12,188.17 | Rp 12,188.17         |
| 19-Aug-15 |       |       | 1.84   | 14.07             |               |                 | Rp 10,778.60 | Rp 10,778.60         |
| 20-Aug-15 |       |       | 0      | 14.07             |               |                 | Rp 10,778.60 | Rp 10,778.60         |
| 21-Aug-15 |       |       | 0      | 14.07             |               |                 | Rp 10,778.60 | Rp 10,778.60         |
| 22-Aug-15 |       |       | 0      | 14.07             |               |                 | Rp 10,778.60 | Rp 10,778.60         |
| 23-Aug-15 |       |       | 0      | 14.07             |               |                 | Rp 10,778.60 | Rp 10,778.60         |
| 24-Aug-15 | 11.63 |       | 9.8    | 4.27              | Rp 131,774.28 |                 | Rp 3,271.12  | Rp 135,045.40        |
| 25-Aug-15 |       |       | 0      | 4.27              |               |                 | Rp 3,271.12  | Rp 3,271.12          |
| 26-Aug-15 |       |       | 0      | 4.27              |               |                 | Rp 3,271.12  | Rp 3,271.12          |
| 27-Aug-15 |       |       | 0      | 4.27              |               |                 | Rp 3,271.12  | Rp 3,271.12          |
| 28-Aug-15 |       | 11.63 | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 29-Aug-15 |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 30-Aug-15 |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 31-Aug-15 |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 1-Sep-15  |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 2-Sep-15  |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 3-Sep-15  |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 4-Sep-15  |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 5-Sep-15  |       |       | 0      | 15.9              |               |                 | Rp 12,180.51 | Rp 12,180.51         |
| 6-Sep-15  |       |       | 1.53   | 14.37             |               |                 | Rp 11,008.43 | Rp 11,008.43         |
| 7-Sep-15  |       |       | 0      | 14.37             |               |                 | Rp 11,008.43 | Rp 11,008.43         |
| 8-Sep-15  |       |       | 0      | 14.37             |               |                 | Rp 11,008.43 | Rp 11,008.43         |
| 9-Sep-15  |       |       | 0      | 14.37             |               |                 | Rp 11,008.43 | Rp 11,008.43         |
| 10-Sep-15 |       |       | 0      | 14.37             |               |                 | Rp 11,008.43 | Rp 11,008.43         |
| 11-Sep-15 |       |       | 0      | 14.37             |               |                 | Rp 11,008.43 | Rp 11,008.43         |
| 12-Sep-15 |       |       | 0.01   | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 13-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 14-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 15-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 16-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 17-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 18-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 19-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 20-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 21-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 22-Sep-15 |       |       | 0      | 14.36             |               |                 | Rp 11,000.77 | Rp 11,000.77         |
| 23-Sep-15 | 11.63 |       | 8.74   | 5.62              | Rp 131,774.28 |                 | Rp 4,305.31  | Rp 136,079.59        |
| 24-Sep-15 |       |       | 0      | 5.62              |               |                 | Rp 4,305.31  | Rp 4,305.31          |
| 25-Sep-15 |       | 11.63 | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 26-Sep-15 |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 27-Sep-15 |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 28-Sep-15 |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 29-Sep-15 |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 30-Sep-15 |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 1-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 2-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 3-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 4-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 5-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 6-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 7-Oct-15  |       |       | 0      | 17.25             |               |                 | Rp 13,214.71 | Rp 13,214.71         |
| 8-Oct-15  |       |       | 2.27   | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 9-Oct-15  |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 10-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 11-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 12-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 13-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 14-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 15-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 16-Oct-15 |       |       | 0      | 14.98             |               |                 | Rp 11,475.73 | Rp 11,475.73         |
| 17-Oct-15 |       |       | 0.7    | 14.28             |               |                 | Rp 10,939.48 | Rp 10,939.48         |
| 18-Oct-15 |       |       | 1.3    | 12.98             |               |                 | Rp 9,943.59  | Rp 9,943.59          |
| 19-Oct-15 |       |       | 0      | 12.98             |               |                 | Rp 9,943.59  | Rp 9,943.59          |
| 20-Oct-15 |       |       | 0      | 12.98             |               |                 | Rp 9,943.59  | Rp 9,943.59          |
| 21-Oct-15 |       |       | 0      | 12.98             |               |                 | Rp 9,943.59  | Rp 9,943.59          |
| 22-Oct-15 | 11.63 |       | 9.23   | 3.75              | Rp 131,774.28 |                 | Rp 2,872.76  | Rp 134,647.04        |
| 23-Oct-15 |       |       | 0      | 3.75              |               |                 | Rp 2,872.76  | Rp 2,872.76          |
| 24-Oct-15 |       |       | 0      | 3.75              |               |                 | Rp 2,872.76  | Rp 2,872.76          |
| 25-Oct-15 |       |       | 0      | 3.75              |               |                 | Rp 2,872.76  | Rp 2,872.76          |
| 26-Oct-15 |       | 11.63 | 0      | 15.38             |               |                 | Rp 11,782.16 | Rp 11,782.16         |
| 27-Oct-15 |       |       | 0      | 15.38             |               |                 | Rp 11,782.16 | Rp 11,782.16         |
| 28-Oct-15 |       |       | 0      | 15.38             |               |                 | Rp 11,782.16 | Rp 11,782.16         |
| 29-Oct-15 |       |       | 3.21   | 12.17             |               |                 | Rp 9,323.07  | Rp 9,323.07          |
| 30-Oct-15 |       |       | 0.02   | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 31-Oct-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 1-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 2-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 3-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 4-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 5-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 6-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 7-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 8-Nov-15  |       |       | 19.51  | -7.36             |               | Rp 1,556,301.60 | Rp 9,307.75  | Rp 1,565,609.35      |
| 9-Nov-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 10-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 11-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 12-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 13-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 14-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 15-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 16-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 17-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 18-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 19-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 20-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 21-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 22-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 23-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 24-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 25-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 26-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 27-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 28-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 29-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 30-Nov-15 |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 1-Dec-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |
| 2-Dec-15  |       |       | 0      | 12.15             |               |                 | Rp 9,307.75  | Rp 9,307.75          |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 3-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 4-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 5-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 6-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 7-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 8-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 9-Dec-15  |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 10-Dec-15 |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 11-Dec-15 |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 12-Dec-15 |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 13-Dec-15 |       |    | 0      | 12.15             |            |                | Rp 9,307.75  | Rp 9,307.75          |
| 14-Dec-15 |       |    | 1.98   | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 15-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 16-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 17-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 18-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 19-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 20-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 21-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 22-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 23-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 24-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 25-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 26-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 27-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 28-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 29-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 30-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
| 31-Dec-15 |       |    | 0      | 10.17             |            |                | Rp 7,790.93  | Rp 7,790.93          |
|           |       |    | 43     |                   | 4          | 2              |              | Rp 12,410,818.78     |



## APPENDIX E

### CONTINUOUS REVIEW LEAD TIME

(AC 260 Gr 79 x 109)

#### Random Value

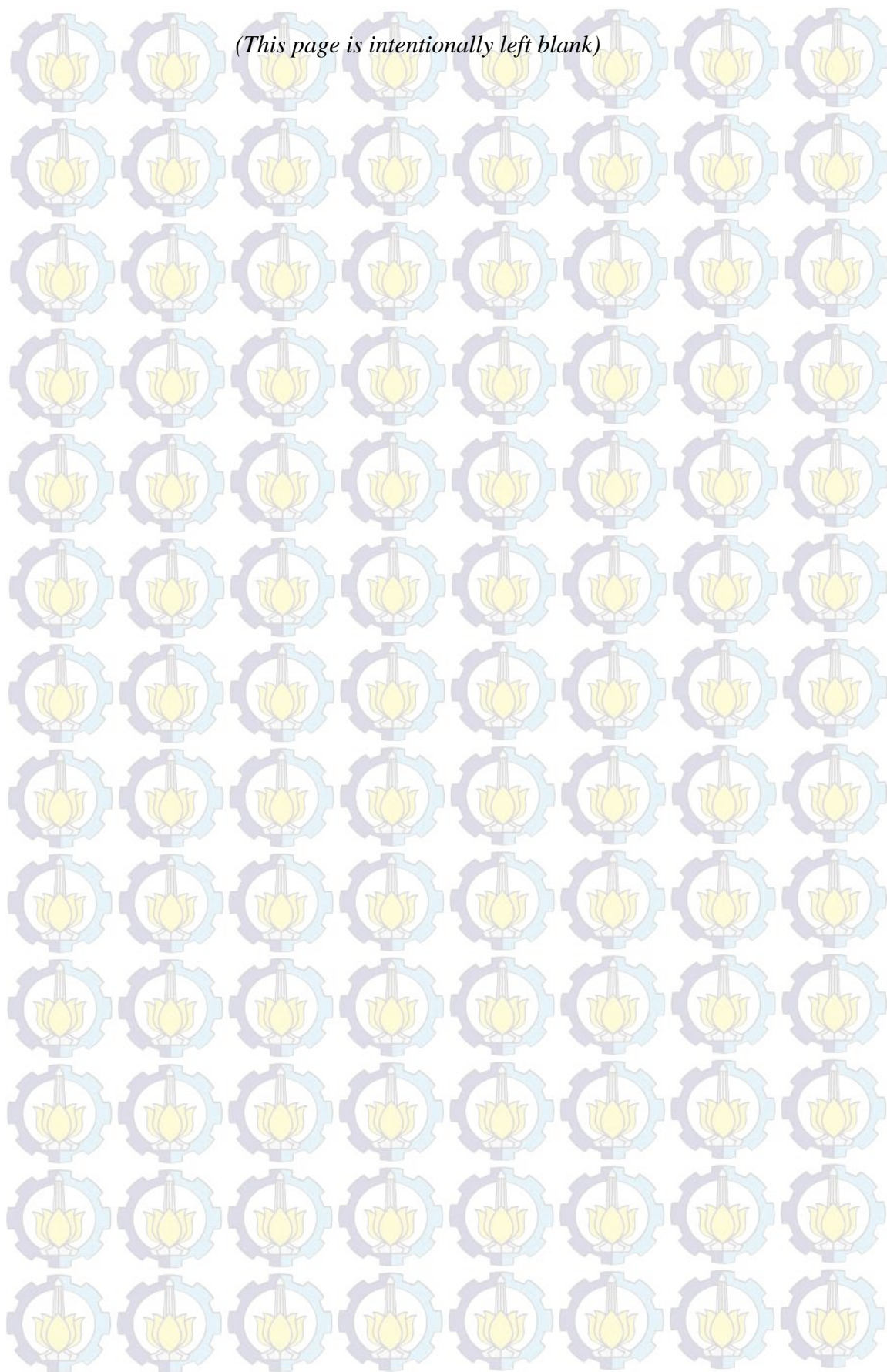
| No | Random 1   | Random2    | Random 3   | Random 4   | Random 5   | Random 6   | Random 7   |
|----|------------|------------|------------|------------|------------|------------|------------|
| 1  | 0.22951537 | 0.07262231 | 0.73041601 | 0.35579931 | 0.24885848 | 0.60018393 | 0.22907444 |
| 2  | 0.53673041 | 0.59180258 | 0.55343793 | 0.91673658 | 0.69762561 | 0.71009087 | 0.82052324 |
| 3  | 0.73259162 |            | 0.15080117 | 0.1917808  | 0.52084447 | 0.6605796  | 0.16184289 |
| 4  | 0.70698493 |            |            | 0.44492238 | 0.30711767 | 0.32222218 | 0.8269609  |
| 5  |            |            |            | 0.10693526 | 0.37758689 |            |            |
| 6  |            |            |            | 0.06286258 | 0.22098697 |            |            |

#### Generated Lead Time

| No | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 |
|----|---------|---------|---------|---------|---------|---------|---------|
| 1  | 2       | 1       | 3       | 2       | 2       | 3       | 2       |
| 2  | 3       | 3       | 3       | 6       | 3       | 3       | 4       |
| 3  | 3       |         | 2       | 2       | 3       | 3       | 2       |
| 4  | 3       |         |         | 2       | 2       | 2       | 4       |
| 5  |         |         |         | 1       | 2       |         |         |
| 6  |         |         |         | 1       | 2       |         |         |



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# **APPENDIX F** **PERIODIC REVIEW REPLICATION (AC 260 Gr 79 x 109)**

## **Replication 1**

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |    | 9.84   | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 10-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 11-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 12-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 13-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 14-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 15-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 16-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 17-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 18-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 19-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 20-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 21-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 22-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 23-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 24-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 25-Jan-15 |       |    | 0      | 74.91             |            |                | Rp 57,386.30 | Rp 57,386.30         |
| 26-Jan-15 |       |    | 0.89   | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 27-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 28-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 29-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 30-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 31-Jan-15 |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 1-Feb-15  |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 2-Feb-15  |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 3-Feb-15  |       |    | 0      | 74.02             |            |                | Rp 56,704.50 | Rp 56,704.50         |
| 4-Feb-15  |       |    | 1.85   | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 5-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 6-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 7-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 8-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 9-Feb-15  |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 10-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 11-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 12-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 13-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 14-Feb-15 |       |    | 0      | 72.17             |            |                | Rp 55,287.27 | Rp 55,287.27         |
| 15-Feb-15 |       |    | 0.29   | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 16-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 17-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 18-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 19-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 20-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 21-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 22-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 23-Feb-15 |       |    | 0      | 71.88             |            |                | Rp 55,065.11 | Rp 55,065.11         |
| 24-Feb-15 |       |    | 16.29  | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 25-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 26-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 27-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 28-Feb-15 |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 1-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 2-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 3-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |
| 4-Mar-15  |       |    | 0      | 55.59             |            |                | Rp 42,585.83 | Rp 42,585.83         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 5-Mar-15  |       |       | 0      | 55.59             |               |                | Rp 42,585.83 | Rp 42,585.83         |
| 6-Mar-15  |       |       | 0      | 55.59             |               |                | Rp 42,585.83 | Rp 42,585.83         |
| 7-Mar-15  |       |       | 0      | 55.59             |               |                | Rp 42,585.83 | Rp 42,585.83         |
| 8-Mar-15  |       |       | 0      | 55.59             |               |                | Rp 42,585.83 | Rp 42,585.83         |
| 9-Mar-15  |       |       | 7.74   | 47.85             |               |                | Rp 36,656.45 | Rp 36,656.45         |
| 10-Mar-15 |       |       | 0      | 47.85             |               |                | Rp 36,656.45 | Rp 36,656.45         |
| 11-Mar-15 |       |       | 2.32   | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 12-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 13-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 14-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 15-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 16-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 17-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 18-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 19-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 20-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 21-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 22-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 23-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 24-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 25-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 26-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 27-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 28-Mar-15 |       |       | 0      | 45.53             |               |                | Rp 34,879.17 | Rp 34,879.17         |
| 29-Mar-15 |       |       | 4.82   | 40.71             |               |                | Rp 31,186.71 | Rp 31,186.71         |
| 30-Mar-15 |       |       | 2.06   | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 31-Mar-15 |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 1-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 2-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 3-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 4-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 5-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 6-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 7-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 8-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 9-Apr-15  |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 10-Apr-15 |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 11-Apr-15 |       |       | 0      | 38.65             |               |                | Rp 29,608.61 | Rp 29,608.61         |
| 12-Apr-15 |       |       | 2.91   | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 13-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 14-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 15-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 16-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 17-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 18-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 19-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 20-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 21-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 22-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 23-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 24-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 25-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 26-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 27-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 28-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 29-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 30-Apr-15 |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 1-May-15  |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 2-May-15  |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 3-May-15  |       |       | 0      | 35.74             |               |                | Rp 27,379.34 | Rp 27,379.34         |
| 4-May-15  |       |       | 0.61   | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 5-May-15  |       |       | 0      | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 6-May-15  |       |       | 0      | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 7-May-15  |       |       | 17.57  | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 8-May-15  |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 9-May-15  |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 10-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 11-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 12-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 13-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 14-May-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 15-May-15 | 13.17 |       | 0      | 17.56             | Rp 131,774.28 |                | Rp 13,452.19 | Rp 145,226.47        |
| 16-May-15 |       | 13.17 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-May-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 18-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 20-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 21-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 22-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 23-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 24-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 25-May-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33 | Rp 23,541.33         |
| 26-May-15 |       |    | 3.61   | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 27-May-15 |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 28-May-15 |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 29-May-15 |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 30-May-15 |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 31-May-15 |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 1-Jun-15  |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 2-Jun-15  |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 3-Jun-15  |       |    | 0      | 27.12             |            |                | Rp 20,775.82 | Rp 20,775.82         |
| 4-Jun-15  |       |    | 1      | 26.12             |            |                | Rp 20,009.75 | Rp 20,009.75         |
| 5-Jun-15  |       |    | 0      | 26.12             |            |                | Rp 20,009.75 | Rp 20,009.75         |
| 6-Jun-15  |       |    | 0      | 26.12             |            |                | Rp 20,009.75 | Rp 20,009.75         |
| 7-Jun-15  |       |    | 0      | 26.12             |            |                | Rp 20,009.75 | Rp 20,009.75         |
| 8-Jun-15  |       |    | 0      | 26.12             |            |                | Rp 20,009.75 | Rp 20,009.75         |
| 9-Jun-15  |       |    | 0      | 26.12             |            |                | Rp 20,009.75 | Rp 20,009.75         |
| 10-Jun-15 |       |    | 8.07   | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 11-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 12-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 13-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 14-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 15-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 16-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 17-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 18-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 19-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 20-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 21-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 22-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 23-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 24-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 25-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 26-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 27-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 28-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 29-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 30-Jun-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 1-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 2-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 3-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 4-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 5-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 6-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 7-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 8-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 9-Jul-15  |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 10-Jul-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 11-Jul-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 12-Jul-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 13-Jul-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 14-Jul-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 15-Jul-15 |       |    | 0      | 18.05             |            |                | Rp 13,827.56 | Rp 13,827.56         |
| 16-Jul-15 |       |    | 2.95   | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 17-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 18-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 19-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 20-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 21-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 22-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 23-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 24-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 25-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 26-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 27-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 28-Jul-15 |       |    | 0      | 15.1              |            |                | Rp 11,567.66 | Rp 11,567.66         |
| 29-Jul-15 |       |    | 1.21   | 13.89             |            |                | Rp 10,640.71 | Rp 10,640.71         |
| 30-Jul-15 |       |    | 0      | 13.89             |            |                | Rp 10,640.71 | Rp 10,640.71         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 31-Jul-15 |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 1-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 2-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 3-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 4-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 5-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 6-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 7-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 8-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 9-Aug-15  |       |       | 0      | 13.89             |               |                | Rp 10,640.71 | Rp 10,640.71         |
| 10-Aug-15 |       |       | 1.05   | 12.84             |               |                | Rp 9,836.34  | Rp 9,836.34          |
| 11-Aug-15 |       |       | 0      | 12.84             |               |                | Rp 9,836.34  | Rp 9,836.34          |
| 12-Aug-15 |       |       | 0      | 12.84             |               |                | Rp 9,836.34  | Rp 9,836.34          |
| 13-Aug-15 | 17.89 |       | 0      | 12.84             | Rp 131,774.28 |                | Rp 9,836.34  | Rp 141,610.62        |
| 14-Aug-15 |       |       | 0      | 12.84             |               |                | Rp 9,836.34  | Rp 9,836.34          |
| 15-Aug-15 |       |       | 0      | 12.84             |               |                | Rp 9,836.34  | Rp 9,836.34          |
| 16-Aug-15 |       | 17.89 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 20-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 21-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 22-Aug-15 |       |       | 1.33   | 29.4              |               |                | Rp 22,522.46 | Rp 22,522.46         |
| 23-Aug-15 |       |       | 0      | 29.4              |               |                | Rp 22,522.46 | Rp 22,522.46         |
| 24-Aug-15 |       |       | 0      | 29.4              |               |                | Rp 22,522.46 | Rp 22,522.46         |
| 25-Aug-15 |       |       | 1.65   | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 26-Aug-15 |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 27-Aug-15 |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 28-Aug-15 |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 29-Aug-15 |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 30-Aug-15 |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 31-Aug-15 |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 1-Sep-15  |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 2-Sep-15  |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 3-Sep-15  |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 4-Sep-15  |       |       | 0      | 27.75             |               |                | Rp 21,258.44 | Rp 21,258.44         |
| 5-Sep-15  |       |       | 3.48   | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 6-Sep-15  |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 7-Sep-15  |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 8-Sep-15  |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 9-Sep-15  |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 10-Sep-15 |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 11-Sep-15 |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 12-Sep-15 |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 13-Sep-15 |       |       | 0      | 24.27             |               |                | Rp 18,592.52 | Rp 18,592.52         |
| 14-Sep-15 |       |       | 0.29   | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 15-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 16-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 17-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 18-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 19-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 20-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 21-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 22-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 23-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 24-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 25-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 26-Sep-15 |       |       | 0      | 23.98             |               |                | Rp 18,370.36 | Rp 18,370.36         |
| 27-Sep-15 |       |       | 2.65   | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 28-Sep-15 |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 29-Sep-15 |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 30-Sep-15 |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 1-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 2-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 3-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 4-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 5-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 6-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 7-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 8-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 9-Oct-15  |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 10-Oct-15 |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 11-Oct-15 |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |
| 12-Oct-15 |       |       | 0      | 21.33             |               |                | Rp 16,340.27 | Rp 16,340.27         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 13-Oct-15 |       |       | 1.21   | 20.12             |               |                | Rp 15,413.33 | Rp 15,413.33         |
| 14-Oct-15 |       |       | 0      | 20.12             |               |                | Rp 15,413.33 | Rp 15,413.33         |
| 15-Oct-15 |       |       | 3.86   | 16.26             |               |                | Rp 12,456.30 | Rp 12,456.30         |
| 16-Oct-15 |       |       | 0      | 16.26             |               |                | Rp 12,456.30 | Rp 12,456.30         |
| 17-Oct-15 |       |       | 0      | 16.26             |               |                | Rp 12,456.30 | Rp 12,456.30         |
| 18-Oct-15 |       |       | 0      | 16.26             |               |                | Rp 12,456.30 | Rp 12,456.30         |
| 19-Oct-15 |       |       | 0      | 16.26             |               |                | Rp 12,456.30 | Rp 12,456.30         |
| 20-Oct-15 |       |       | 5.74   | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 21-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 22-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 23-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 24-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 25-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 26-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 27-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 28-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 29-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 30-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 31-Oct-15 |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 1-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 2-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 3-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 4-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 5-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 6-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 7-Nov-15  |       |       | 0      | 10.52             |               |                | Rp 8,059.06  | Rp 8,059.06          |
| 8-Nov-15  |       |       | 1.29   | 9.23              |               |                | Rp 7,070.83  | Rp 7,070.83          |
| 9-Nov-15  |       |       | 0      | 9.23              |               |                | Rp 7,070.83  | Rp 7,070.83          |
| 10-Nov-15 |       |       | 0.95   | 8.28              |               |                | Rp 6,343.06  | Rp 6,343.06          |
| 11-Nov-15 | 22.45 |       | 0      | 8.28              | Rp 131,774.28 |                | Rp 6,343.06  | Rp 138,117.34        |
| 12-Nov-15 |       |       | 0      | 8.28              |               |                | Rp 6,343.06  | Rp 6,343.06          |
| 13-Nov-15 |       |       | 0      | 8.28              |               |                | Rp 6,343.06  | Rp 6,343.06          |
| 14-Nov-15 |       | 22.45 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Nov-15 |       |       | 0.53   | 30.2              |               |                | Rp 23,135.31 | Rp 23,135.31         |
| 18-Nov-15 |       |       | 0      | 30.2              |               |                | Rp 23,135.31 | Rp 23,135.31         |
| 19-Nov-15 |       |       | 0      | 30.2              |               |                | Rp 23,135.31 | Rp 23,135.31         |
| 20-Nov-15 |       |       | 0      | 30.2              |               |                | Rp 23,135.31 | Rp 23,135.31         |
| 21-Nov-15 |       |       | 0      | 30.2              |               |                | Rp 23,135.31 | Rp 23,135.31         |
| 22-Nov-15 |       |       | 8.24   | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 23-Nov-15 |       |       | 0      | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 24-Nov-15 |       |       | 0      | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 25-Nov-15 |       |       | 0      | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 26-Nov-15 |       |       | 0      | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 27-Nov-15 |       |       | 0      | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 28-Nov-15 |       |       | 0      | 21.96             |               |                | Rp 16,822.90 | Rp 16,822.90         |
| 29-Nov-15 |       |       | 0.97   | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 30-Nov-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 1-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 2-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 3-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 4-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 5-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 6-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 7-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 8-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 9-Dec-15  |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 10-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 11-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 12-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 13-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 14-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 15-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 16-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 17-Dec-15 |       |       | 0      | 20.99             |               |                | Rp 16,079.81 | Rp 16,079.81         |
| 18-Dec-15 |       |       | 0.34   | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 19-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 20-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 21-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 22-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 23-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 24-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 25-Dec-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 26-Dec-15 |       |    | 0.14   | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 27-Dec-15 |       |    | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 28-Dec-15 |       |    | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 29-Dec-15 |       |    | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 30-Dec-15 |       |    | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
| 31-Dec-15 |       |    | 0      | 20.51             |            |                | Rp 15,712.10 | Rp 15,712.10         |
|           |       |    |        |                   |            |                |              | Rp 9,648,031.21      |

## Replication 2

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0.25   | 84.5              |            |                | Rp 64,732.92 | Rp 64,732.92         |
| 5-Jan-15  |       |    | 0      | 84.5              |            |                | Rp 64,732.92 | Rp 64,732.92         |
| 6-Jan-15  |       |    | 0      | 84.5              |            |                | Rp 64,732.92 | Rp 64,732.92         |
| 7-Jan-15  |       |    | 1.01   | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 8-Jan-15  |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 9-Jan-15  |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 10-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 11-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 12-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 13-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 14-Jan-15 |       |    | 0      | 83.49             |            |                | Rp 63,959.18 | Rp 63,959.18         |
| 15-Jan-15 |       |    | 3.23   | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 16-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 17-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 18-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 19-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 20-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 21-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 22-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 23-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 24-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 25-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 26-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 27-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 28-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 29-Jan-15 |       |    | 0      | 80.26             |            |                | Rp 61,484.78 | Rp 61,484.78         |
| 30-Jan-15 |       |    | 1.5    | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 31-Jan-15 |       |    | 0      | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 1-Feb-15  |       |    | 0      | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 2-Feb-15  |       |    | 0      | 78.76             |            |                | Rp 60,335.67 | Rp 60,335.67         |
| 3-Feb-15  |       |    | 1.17   | 77.59             |            |                | Rp 59,439.37 | Rp 59,439.37         |
| 4-Feb-15  |       |    | 2.09   | 75.5              |            |                | Rp 57,838.29 | Rp 57,838.29         |
| 5-Feb-15  |       |    | 1.38   | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 6-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 7-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 8-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 9-Feb-15  |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 10-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 11-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 12-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 13-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 14-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 15-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 16-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 17-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 18-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 19-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 20-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 21-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 22-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 23-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 24-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 25-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 26-Feb-15 |       |    | 0      | 74.12             |            |                | Rp 56,781.11 | Rp 56,781.11         |
| 27-Feb-15 |       |    | 3.07   | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 28-Feb-15 |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 1-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 2-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 3-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 4-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 5-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 6-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 7-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 8-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 9-Mar-15  |       |    | 0      | 71.05             |            |                | Rp 54,429.27 | Rp 54,429.27         |
| 10-Mar-15 |       |    | 0.13   | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 11-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 12-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 13-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 14-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 15-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 16-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 17-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 18-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 19-Mar-15 |       |    | 0      | 70.92             |            |                | Rp 54,329.68 | Rp 54,329.68         |
| 20-Mar-15 |       |    | 2.51   | 68.41             |            |                | Rp 52,406.85 | Rp 52,406.85         |
| 21-Mar-15 |       |    | 0      | 68.41             |            |                | Rp 52,406.85 | Rp 52,406.85         |
| 22-Mar-15 |       |    | 0.18   | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 23-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 24-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 25-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 26-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 27-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 28-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 29-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 30-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 31-Mar-15 |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 1-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 2-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 3-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 4-Apr-15  |       |    | 0      | 68.23             |            |                | Rp 52,268.96 | Rp 52,268.96         |
| 5-Apr-15  |       |    | 1.51   | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 6-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 7-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 8-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 9-Apr-15  |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 10-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 11-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 12-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 13-Apr-15 |       |    | 0      | 66.72             |            |                | Rp 51,112.19 | Rp 51,112.19         |
| 14-Apr-15 |       |    | 5.86   | 60.86             |            |                | Rp 46,623.02 | Rp 46,623.02         |
| 15-Apr-15 |       |    | 0      | 60.86             |            |                | Rp 46,623.02 | Rp 46,623.02         |
| 16-Apr-15 |       |    | 0      | 60.86             |            |                | Rp 46,623.02 | Rp 46,623.02         |
| 17-Apr-15 |       |    | 1.37   | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 18-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 19-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 20-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 21-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 22-Apr-15 |       |    | 0      | 59.49             |            |                | Rp 45,573.50 | Rp 45,573.50         |
| 23-Apr-15 |       |    | 1.14   | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 24-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 25-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 26-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 27-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 28-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 29-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 30-Apr-15 |       |    | 0      | 58.35             |            |                | Rp 44,700.18 | Rp 44,700.18         |
| 1-May-15  |       |    | 0.58   | 57.77             |            |                | Rp 44,255.86 | Rp 44,255.86         |
| 2-May-15  |       |    | 0      | 57.77             |            |                | Rp 44,255.86 | Rp 44,255.86         |
| 3-May-15  |       |    | 0      | 57.77             |            |                | Rp 44,255.86 | Rp 44,255.86         |
| 4-May-15  |       |    | 1.96   | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 5-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 6-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 7-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 8-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 9-May-15  |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 10-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 11-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 12-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 13-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 14-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 15-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 16-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 17-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 18-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 19-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 20-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 21-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 22-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 23-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 24-May-15 |       |    | 0      | 55.81             |            |                | Rp 42,754.37 | Rp 42,754.37         |
| 25-May-15 |       |    | 3.01   | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 26-May-15 |       |    | 0      | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 27-May-15 |       |    | 0      | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 28-May-15 |       |    | 0      | 52.8              |            |                | Rp 40,448.50 | Rp 40,448.50         |
| 29-May-15 |       |    | 0.85   | 51.95             |            |                | Rp 39,797.34 | Rp 39,797.34         |
| 30-May-15 |       |    | 0      | 51.95             |            |                | Rp 39,797.34 | Rp 39,797.34         |
| 31-May-15 |       |    | 7.4    | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 1-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 2-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 3-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 4-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 5-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 6-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 7-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 8-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 9-Jun-15  |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 10-Jun-15 |       |    | 0      | 44.55             |            |                | Rp 34,128.42 | Rp 34,128.42         |
| 11-Jun-15 |       |    | 2.01   | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 12-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 13-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 14-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 15-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 16-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 17-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 18-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 19-Jun-15 |       |    | 0      | 42.54             |            |                | Rp 32,588.62 | Rp 32,588.62         |
| 20-Jun-15 |       |    | 0.87   | 41.67             |            |                | Rp 31,922.14 | Rp 31,922.14         |
| 21-Jun-15 |       |    | 0      | 41.67             |            |                | Rp 31,922.14 | Rp 31,922.14         |
| 22-Jun-15 |       |    | 0.63   | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 23-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 24-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 25-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 26-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 27-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 28-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 29-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 30-Jun-15 |       |    | 0      | 41.04             |            |                | Rp 31,439.51 | Rp 31,439.51         |
| 1-Jul-15  |       |    | 0.93   | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 2-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 3-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 4-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 5-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 6-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 7-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 8-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 9-Jul-15  |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 10-Jul-15 |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 11-Jul-15 |       |    | 0      | 40.11             |            |                | Rp 30,727.07 | Rp 30,727.07         |
| 12-Jul-15 |       |    | 1.27   | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 13-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 14-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 15-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 16-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 17-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 18-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 19-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 20-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 21-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 22-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 23-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 24-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 25-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |
| 26-Jul-15 |       |    | 0      | 38.84             |            |                | Rp 29,754.16 | Rp 29,754.16         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 27-Jul-15 |       |    | 0.28   | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 28-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 29-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 30-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 31-Jul-15 |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 1-Aug-15  |       |    | 0      | 38.56             |            |                | Rp 29,539.66 | Rp 29,539.66         |
| 2-Aug-15  |       |    | 2.37   | 36.19             |            |                | Rp 27,724.07 | Rp 27,724.07         |
| 3-Aug-15  |       |    | 0      | 36.19             |            |                | Rp 27,724.07 | Rp 27,724.07         |
| 4-Aug-15  |       |    | 0.93   | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 5-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 6-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 7-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 8-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 9-Aug-15  |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 10-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 11-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 12-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 13-Aug-15 |       |    | 0      | 35.26             |            |                | Rp 27,011.63 | Rp 27,011.63         |
| 14-Aug-15 |       |    | 3.06   | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 15-Aug-15 |       |    | 0      | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 16-Aug-15 |       |    | 0      | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 17-Aug-15 |       |    | 0      | 32.2              |            |                | Rp 24,667.45 | Rp 24,667.45         |
| 18-Aug-15 |       |    | 2.81   | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 19-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 20-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 21-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 22-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 23-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 24-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 25-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 26-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 27-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 28-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 29-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 30-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 31-Aug-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 1-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 2-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 3-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 4-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 5-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 6-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 7-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 8-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 9-Sep-15  |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 10-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 11-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 12-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 13-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 14-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 15-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 16-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 17-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 18-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 19-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 20-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 21-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 22-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 23-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 24-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 25-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 26-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 27-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 28-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 29-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 30-Sep-15 |       |    | 0      | 29.39             |            |                | Rp 22,514.80 | Rp 22,514.80         |
| 1-Oct-15  |       |    | 2.34   | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 2-Oct-15  |       |    | 0      | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 3-Oct-15  |       |    | 0      | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 4-Oct-15  |       |    | 0      | 27.05             |            |                | Rp 20,722.19 | Rp 20,722.19         |
| 5-Oct-15  |       |    | 17.94  | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 6-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 7-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |
| 8-Oct-15  |       |    | 0      | 9.11              |            |                | Rp 6,978.90  | Rp 6,978.90          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 9-Oct-15  |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 10-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 11-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 12-Oct-15 | 21.62 |       | 0      | 9.11              | Rp 131,774.28 |                | Rp 6,978.90  | Rp 138,753.18        |
| 13-Oct-15 |       |       | 0      | 9.11              |               |                | Rp 6,978.90  | Rp 6,978.90          |
| 14-Oct-15 |       | 21.62 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 20-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 21-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 22-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 23-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 24-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 25-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 26-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 27-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 28-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 29-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 30-Oct-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 31-Oct-15 |       |       | 0.64   | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 1-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 2-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 3-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 4-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 5-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 6-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 7-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 8-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 9-Nov-15  |       |       | 0      | 30.09             |               |                | Rp 23,051.05 | Rp 23,051.05         |
| 10-Nov-15 |       |       | 5.35   | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 11-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 12-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 13-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 14-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 15-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 16-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 17-Nov-15 |       |       | 0      | 24.74             |               |                | Rp 18,952.57 | Rp 18,952.57         |
| 18-Nov-15 |       |       | 0.29   | 24.45             |               |                | Rp 18,730.41 | Rp 18,730.41         |
| 19-Nov-15 |       |       | 3.8    | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 20-Nov-15 |       |       | 0      | 20.65             |               |                | Rp 15,819.35 | Rp 15,819.35         |
| 21-Nov-15 |       |       | 3.99   | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 22-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 23-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 24-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 25-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 26-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 27-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 28-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 29-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 30-Nov-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 1-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 2-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 3-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 4-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 5-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 6-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 7-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 8-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 9-Dec-15  |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 10-Dec-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 11-Dec-15 | 14.07 |       | 0      | 16.66             | Rp 131,774.28 |                | Rp 12,762.73 | Rp 144,537.01        |
| 12-Dec-15 |       |       | 0      | 16.66             |               |                | Rp 12,762.73 | Rp 12,762.73         |
| 13-Dec-15 |       | 14.07 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 14-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 20-Dec-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 21-Dec-15 |       |       | 1.47   | 29.26             |               |                | Rp 22,415.21 | Rp 22,415.21         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 22-Dec-15 |       |    | 0      | 29.26             |            |                | Rp 22,415.21 | Rp 22,415.21         |
| 23-Dec-15 |       |    | 0      | 29.26             |            |                | Rp 22,415.21 | Rp 22,415.21         |
| 24-Dec-15 |       |    | 0      | 29.26             |            |                | Rp 22,415.21 | Rp 22,415.21         |
| 25-Dec-15 |       |    | 0      | 29.26             |            |                | Rp 22,415.21 | Rp 22,415.21         |
| 26-Dec-15 |       |    | 0      | 29.26             |            |                | Rp 22,415.21 | Rp 22,415.21         |
| 27-Dec-15 |       |    | 0      | 29.26             |            |                | Rp 22,415.21 | Rp 22,415.21         |
| 28-Dec-15 |       |    | 1.47   | 27.79             |            |                | Rp 21,289.09 | Rp 21,289.09         |
| 29-Dec-15 |       |    | 0      | 27.79             |            |                | Rp 21,289.09 | Rp 21,289.09         |
| 30-Dec-15 |       |    | 0      | 27.79             |            |                | Rp 21,289.09 | Rp 21,289.09         |
| 31-Dec-15 |       |    | 0      | 27.79             |            |                | Rp 21,289.09 | Rp 21,289.09         |
|           |       |    |        |                   |            |                |              | Rp 13,322,230.58     |

### Replication 3

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 3.01   | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 3-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 4-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 5-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 6-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 7-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 8-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 9-Jan-15  |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 10-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 11-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 12-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 13-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 14-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 15-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 16-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 17-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 18-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 19-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 20-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 21-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 22-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 23-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 24-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 25-Jan-15 |       |    | 0      | 81.74             |            |                | Rp 62,618.56 | Rp 62,618.56         |
| 26-Jan-15 |       |    | 1.39   | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 27-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 28-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 29-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 30-Jan-15 |       |    | 0      | 80.35             |            |                | Rp 61,553.72 | Rp 61,553.72         |
| 31-Jan-15 |       |    | 2.48   | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 1-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 2-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 3-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 4-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 5-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 6-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 7-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 8-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 9-Feb-15  |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 10-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 11-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 12-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 13-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 14-Feb-15 |       |    | 0      | 77.87             |            |                | Rp 59,653.87 | Rp 59,653.87         |
| 15-Feb-15 |       |    | 0.43   | 77.44             |            |                | Rp 59,324.46 | Rp 59,324.46         |
| 16-Feb-15 |       |    | 0      | 77.44             |            |                | Rp 59,324.46 | Rp 59,324.46         |
| 17-Feb-15 |       |    | 0      | 77.44             |            |                | Rp 59,324.46 | Rp 59,324.46         |
| 18-Feb-15 |       |    | 3.56   | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 19-Feb-15 |       |    | 0      | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 20-Feb-15 |       |    | 0      | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 21-Feb-15 |       |    | 0      | 73.88             |            |                | Rp 56,597.25 | Rp 56,597.25         |
| 22-Feb-15 |       |    | 1.57   | 72.31             |            |                | Rp 55,394.52 | Rp 55,394.52         |
| 23-Feb-15 |       |    | 0      | 72.31             |            |                | Rp 55,394.52 | Rp 55,394.52         |
| 24-Feb-15 |       |    | 0      | 72.31             |            |                | Rp 55,394.52 | Rp 55,394.52         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 25-Feb-15 |       |    | 0.63   | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 26-Feb-15 |       |    | 3.42   | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 27-Feb-15 |       |    | 0      | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 28-Feb-15 |       |    | 0      | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 1-Mar-15  |       |    | 0      | 68.26             |            |                | Rp 52,291.94 | Rp 52,291.94         |
| 2-Mar-15  |       |    | 0.82   | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 3-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 4-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 5-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 6-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 7-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 8-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 9-Mar-15  |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 10-Mar-15 |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 11-Mar-15 |       |    | 0      | 67.44             |            |                | Rp 51,663.76 | Rp 51,663.76         |
| 12-Mar-15 |       |    | 8.5    | 58.94             |            |                | Rp 45,152.17 | Rp 45,152.17         |
| 13-Mar-15 |       |    | 0      | 58.94             |            |                | Rp 45,152.17 | Rp 45,152.17         |
| 14-Mar-15 |       |    | 0.35   | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 15-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 16-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 17-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 18-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 19-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 20-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 21-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 22-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 23-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 24-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 25-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 26-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 27-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 28-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 29-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 30-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 31-Mar-15 |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 1-Apr-15  |       |    | 0      | 58.59             |            |                | Rp 44,884.04 | Rp 44,884.04         |
| 2-Apr-15  |       |    | 0.26   | 58.33             |            |                | Rp 44,684.86 | Rp 44,684.86         |
| 3-Apr-15  |       |    | 0      | 58.33             |            |                | Rp 44,684.86 | Rp 44,684.86         |
| 4-Apr-15  |       |    | 8.74   | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 5-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 6-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 7-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 8-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 9-Apr-15  |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 10-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 11-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 12-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 13-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 14-Apr-15 |       |    | 0      | 49.59             |            |                | Rp 37,989.41 | Rp 37,989.41         |
| 15-Apr-15 |       |    | 3.49   | 46.1              |            |                | Rp 35,315.83 | Rp 35,315.83         |
| 16-Apr-15 |       |    | 0      | 46.1              |            |                | Rp 35,315.83 | Rp 35,315.83         |
| 17-Apr-15 |       |    | 17.7   | 28.4              |            |                | Rp 21,756.39 | Rp 21,756.39         |
| 18-Apr-15 |       |    | 0.55   | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 19-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 20-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 21-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 22-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 23-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 24-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 25-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 26-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 27-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 28-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 29-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 30-Apr-15 |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 1-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 2-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 3-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 4-May-15  |       |    | 0      | 27.85             |            |                | Rp 21,335.05 | Rp 21,335.05         |
| 5-May-15  |       |    | 1.56   | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 6-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 7-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 8-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |
| 9-May-15  |       |    | 0      | 26.29             |            |                | Rp 20,139.98 | Rp 20,139.98         |



| Date      | Order | In   | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 10-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 11-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 12-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 13-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 14-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 15-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 16-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 17-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 18-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 19-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 20-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 21-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 22-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 23-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 24-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 25-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 26-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 27-May-15 |       |      | 0      | 26.29             |               |                | Rp 20,139.98 | Rp 20,139.98         |
| 28-May-15 |       |      | 1.77   | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 29-May-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 30-May-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 31-May-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 1-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 2-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 3-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 4-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 5-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 6-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 7-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 8-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 9-Jun-15  |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 10-Jun-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 11-Jun-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 12-Jun-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 13-Jun-15 |       |      | 0      | 24.52             |               |                | Rp 18,784.04 | Rp 18,784.04         |
| 14-Jun-15 |       |      | 1.42   | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 15-Jun-15 |       |      | 0      | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 16-Jun-15 |       |      | 0      | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 17-Jun-15 |       |      | 0      | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 18-Jun-15 |       |      | 0      | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 19-Jun-15 |       |      | 0      | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 20-Jun-15 |       |      | 0      | 23.1              |               |                | Rp 17,696.22 | Rp 17,696.22         |
| 21-Jun-15 |       |      | 3.54   | 19.56             |               |                | Rp 14,984.33 | Rp 14,984.33         |
| 22-Jun-15 |       |      | 0.46   | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 23-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 24-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 25-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 26-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 27-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 28-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 29-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 30-Jun-15 |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 1-Jul-15  |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 2-Jul-15  |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 3-Jul-15  |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 4-Jul-15  |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 5-Jul-15  |       |      | 0      | 19.1              |               |                | Rp 14,631.94 | Rp 14,631.94         |
| 6-Jul-15  |       |      | 1.1    | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 7-Jul-15  |       |      | 0      | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 8-Jul-15  |       |      | 0      | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 9-Jul-15  |       |      | 0      | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 10-Jul-15 |       |      | 2.79   | 15.21             |               |                | Rp 11,651.92 | Rp 11,651.92         |
| 11-Jul-15 |       |      | 0      | 15.21             |               |                | Rp 11,651.92 | Rp 11,651.92         |
| 12-Jul-15 |       |      | 0      | 15.21             |               |                | Rp 11,651.92 | Rp 11,651.92         |
| 13-Jul-15 |       |      | 0      | 15.21             |               |                | Rp 11,651.92 | Rp 11,651.92         |
| 14-Jul-15 | 17.6  |      | 2.08   | 13.13             | Rp 131,774.28 |                | Rp 10,058.50 | Rp 141,832.78        |
| 15-Jul-15 |       | 17.6 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Jul-15 |       |      | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Jul-15 |       |      | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Jul-15 |       |      | 1.64   | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 19-Jul-15 |       |      | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 20-Jul-15 |       |      | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 21-Jul-15 |       |      | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 22-Jul-15 |       |      | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 23-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 24-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 25-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 26-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 27-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 28-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 29-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 30-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 31-Jul-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 1-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 2-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 3-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 4-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 5-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 6-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 7-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 8-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 9-Aug-15  |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 10-Aug-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 11-Aug-15 |       |       | 0      | 29.09             |               |                | Rp 22,284.98 | Rp 22,284.98         |
| 12-Aug-15 |       |       | 3.96   | 25.13             |               |                | Rp 19,251.34 | Rp 19,251.34         |
| 13-Aug-15 |       |       | 0      | 25.13             |               |                | Rp 19,251.34 | Rp 19,251.34         |
| 14-Aug-15 |       |       | 0      | 25.13             |               |                | Rp 19,251.34 | Rp 19,251.34         |
| 15-Aug-15 |       |       | 0      | 25.13             |               |                | Rp 19,251.34 | Rp 19,251.34         |
| 16-Aug-15 |       |       | 0      | 25.13             |               |                | Rp 19,251.34 | Rp 19,251.34         |
| 17-Aug-15 |       |       | 9.93   | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 18-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 19-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 20-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 21-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 22-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 23-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 24-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 25-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 26-Aug-15 |       |       | 0      | 15.2              |               |                | Rp 11,644.26 | Rp 11,644.26         |
| 27-Aug-15 |       |       | 1.12   | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 28-Aug-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 29-Aug-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 30-Aug-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 31-Aug-15 |       |       | 0      | 14.08             |               |                | Rp 10,786.27 | Rp 10,786.27         |
| 1-Sep-15  |       |       | 3.02   | 11.06             |               |                | Rp 8,472.73  | Rp 8,472.73          |
| 2-Sep-15  |       |       | 0.72   | 10.34             |               |                | Rp 7,921.16  | Rp 7,921.16          |
| 3-Sep-15  |       |       | 3.57   | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 4-Sep-15  |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 5-Sep-15  |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 6-Sep-15  |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 7-Sep-15  |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 8-Sep-15  |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 9-Sep-15  |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 10-Sep-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 11-Sep-15 |       |       | 0      | 6.77              |               |                | Rp 5,186.29  | Rp 5,186.29          |
| 12-Sep-15 | 23.96 |       | 0      | 6.77              | Rp 131,774.28 |                | Rp 5,186.29  | Rp 136,960.57        |
| 13-Sep-15 |       |       | 0.51   | 6.26              |               |                | Rp 4,795.60  | Rp 4,795.60          |
| 14-Sep-15 |       |       | 0      | 6.26              |               |                | Rp 4,795.60  | Rp 4,795.60          |
| 15-Sep-15 |       |       | 0      | 6.26              |               |                | Rp 4,795.60  | Rp 4,795.60          |
| 16-Sep-15 |       |       | 0      | 6.26              |               |                | Rp 4,795.60  | Rp 4,795.60          |
| 17-Sep-15 |       |       | 0      | 6.26              |               |                | Rp 4,795.60  | Rp 4,795.60          |
| 18-Sep-15 |       | 23.96 | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 19-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 20-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 21-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 22-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 23-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 24-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 25-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 26-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 27-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 28-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 29-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 30-Sep-15 |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 1-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 2-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 3-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 4-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 5-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 6-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 7-Oct-15  |       |       | 0      | 30.22             |               |                | Rp 23,150.64 | Rp 23,150.64         |
| 8-Oct-15  |       |       | 1.43   | 28.79             |               |                | Rp 22,055.16 | Rp 22,055.16         |
| 9-Oct-15  |       |       | 0      | 28.79             |               |                | Rp 22,055.16 | Rp 22,055.16         |
| 10-Oct-15 |       |       | 0      | 28.79             |               |                | Rp 22,055.16 | Rp 22,055.16         |
| 11-Oct-15 |       |       | 0      | 28.79             |               |                | Rp 22,055.16 | Rp 22,055.16         |
| 12-Oct-15 |       |       | 1.38   | 27.41             |               |                | Rp 20,997.98 | Rp 20,997.98         |
| 13-Oct-15 |       |       | 0      | 27.41             |               |                | Rp 20,997.98 | Rp 20,997.98         |
| 14-Oct-15 |       |       | 0      | 27.41             |               |                | Rp 20,997.98 | Rp 20,997.98         |
| 15-Oct-15 |       |       | 0      | 27.41             |               |                | Rp 20,997.98 | Rp 20,997.98         |
| 16-Oct-15 |       |       | 0      | 27.41             |               |                | Rp 20,997.98 | Rp 20,997.98         |
| 17-Oct-15 |       |       | 0      | 27.41             |               |                | Rp 20,997.98 | Rp 20,997.98         |
| 18-Oct-15 |       |       | 0.64   | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 19-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 20-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 21-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 22-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 23-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 24-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 25-Oct-15 |       |       | 0      | 26.77             |               |                | Rp 20,507.69 | Rp 20,507.69         |
| 26-Oct-15 |       |       | 1.63   | 25.14             |               |                | Rp 19,259.00 | Rp 19,259.00         |
| 27-Oct-15 |       |       | 0      | 25.14             |               |                | Rp 19,259.00 | Rp 19,259.00         |
| 28-Oct-15 |       |       | 0      | 25.14             |               |                | Rp 19,259.00 | Rp 19,259.00         |
| 29-Oct-15 |       |       | 0      | 25.14             |               |                | Rp 19,259.00 | Rp 19,259.00         |
| 30-Oct-15 |       |       | 0      | 25.14             |               |                | Rp 19,259.00 | Rp 19,259.00         |
| 31-Oct-15 |       |       | 0      | 25.14             |               |                | Rp 19,259.00 | Rp 19,259.00         |
| 1-Nov-15  |       |       | 9.42   | 15.72             |               |                | Rp 12,042.62 | Rp 12,042.62         |
| 2-Nov-15  |       |       | 5.07   | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 3-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 4-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 5-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 6-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 7-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 8-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 9-Nov-15  |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 10-Nov-15 |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 11-Nov-15 | 20.08 |       | 0      | 10.65             | Rp 131,774.28 |                | Rp 8,158.65  | Rp 139,932.93        |
| 12-Nov-15 |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 13-Nov-15 |       |       | 0      | 10.65             |               |                | Rp 8,158.65  | Rp 8,158.65          |
| 14-Nov-15 |       | 20.08 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Nov-15 |       |       | 1.74   | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 19-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 20-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 21-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 22-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 23-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 24-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 25-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 26-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 27-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 28-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 29-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 30-Nov-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 1-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 2-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 3-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 4-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 5-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 6-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 7-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 8-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 9-Dec-15  |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 10-Dec-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 11-Dec-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 12-Dec-15 |       |       | 0      | 28.99             |               |                | Rp 22,208.37 | Rp 22,208.37         |
| 13-Dec-15 |       |       | 3.67   | 25.32             |               |                | Rp 19,396.89 | Rp 19,396.89         |
| 14-Dec-15 |       |       | 0      | 25.32             |               |                | Rp 19,396.89 | Rp 19,396.89         |
| 15-Dec-15 |       |       | 0      | 25.32             |               |                | Rp 19,396.89 | Rp 19,396.89         |
| 16-Dec-15 |       |       | 0      | 25.32             |               |                | Rp 19,396.89 | Rp 19,396.89         |
| 17-Dec-15 |       |       | 0      | 25.32             |               |                | Rp 19,396.89 | Rp 19,396.89         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 18-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 19-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 20-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 21-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 22-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 23-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 24-Dec-15 |       |    | 0      | 25.32             |            |                | Rp 19,396.89 | Rp 19,396.89         |
| 25-Dec-15 |       |    | 1.56   | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
| 26-Dec-15 |       |    | 0      | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
| 27-Dec-15 |       |    | 0      | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
| 28-Dec-15 |       |    | 0      | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
| 29-Dec-15 |       |    | 0      | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
| 30-Dec-15 |       |    | 0      | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
| 31-Dec-15 |       |    | 0      | 23.76             |            |                | Rp 18,201.82 | Rp 18,201.82         |
|           |       |    |        |                   |            |                |              | Rp 10,788,318.74     |

## Replication 4

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 1.23   | 83.52             |            |                | Rp 63,982.17 | Rp 63,982.17         |
| 8-Jan-15  |       |    | 0      | 83.52             |            |                | Rp 63,982.17 | Rp 63,982.17         |
| 9-Jan-15  |       |    | 4.9    | 78.62             |            |                | Rp 60,228.42 | Rp 60,228.42         |
| 10-Jan-15 |       |    | 0      | 78.62             |            |                | Rp 60,228.42 | Rp 60,228.42         |
| 11-Jan-15 |       |    | 1.09   | 77.53             |            |                | Rp 59,393.41 | Rp 59,393.41         |
| 12-Jan-15 |       |    | 0      | 77.53             |            |                | Rp 59,393.41 | Rp 59,393.41         |
| 13-Jan-15 |       |    | 0      | 77.53             |            |                | Rp 59,393.41 | Rp 59,393.41         |
| 14-Jan-15 |       |    | 1.91   | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 15-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 16-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 17-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 18-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 19-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 20-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 21-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 22-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 23-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 24-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 25-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 26-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 27-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 28-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 29-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 30-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 31-Jan-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 1-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 2-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 3-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 4-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 5-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 6-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 7-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 8-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 9-Feb-15  |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 10-Feb-15 |       |    | 0      | 75.62             |            |                | Rp 57,930.21 | Rp 57,930.21         |
| 11-Feb-15 |       |    | 3.94   | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 12-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 13-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 14-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 15-Feb-15 |       |    | 0      | 71.68             |            |                | Rp 54,911.90 | Rp 54,911.90         |
| 16-Feb-15 |       |    | 9.74   | 61.94             |            |                | Rp 47,450.38 | Rp 47,450.38         |
| 17-Feb-15 |       |    | 0      | 61.94             |            |                | Rp 47,450.38 | Rp 47,450.38         |
| 18-Feb-15 |       |    | 1.86   | 60.08             |            |                | Rp 46,025.49 | Rp 46,025.49         |
| 19-Feb-15 |       |    | 0      | 60.08             |            |                | Rp 46,025.49 | Rp 46,025.49         |
| 20-Feb-15 |       |    | 0      | 60.08             |            |                | Rp 46,025.49 | Rp 46,025.49         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 21-Feb-15 |       |    | 1.92   | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 22-Feb-15 |       |    | 0      | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 23-Feb-15 |       |    | 0      | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 24-Feb-15 |       |    | 0      | 58.16             |            |                | Rp 44,554.63 | Rp 44,554.63         |
| 25-Feb-15 |       |    | 0.41   | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 26-Feb-15 |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 27-Feb-15 |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 28-Feb-15 |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 1-Mar-15  |       |    | 0      | 57.75             |            |                | Rp 44,240.54 | Rp 44,240.54         |
| 2-Mar-15  |       |    | 2.49   | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 3-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 4-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 5-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 6-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 7-Mar-15  |       |    | 0      | 55.26             |            |                | Rp 42,333.03 | Rp 42,333.03         |
| 8-Mar-15  |       |    | 0.2    | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 9-Mar-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 10-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 11-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 12-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 13-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 14-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 15-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 16-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 17-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 18-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 19-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 20-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 21-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 22-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 23-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 24-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 25-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 26-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 27-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 28-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 29-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 30-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 31-Mar-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 1-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 2-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 3-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 4-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 5-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 6-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 7-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 8-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 9-Apr-15  |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 10-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 11-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 12-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 13-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 14-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 15-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 16-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 17-Apr-15 |       |    | 0      | 55.06             |            |                | Rp 42,179.81 | Rp 42,179.81         |
| 18-Apr-15 |       |    | 3.66   | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 19-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 20-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 21-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 22-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 23-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 24-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 25-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 26-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 27-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 28-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 29-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 30-Apr-15 |       |    | 0      | 51.4              |            |                | Rp 39,376.00 | Rp 39,376.00         |
| 1-May-15  |       |    | 1.16   | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 2-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 3-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 4-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |
| 5-May-15  |       |    | 0      | 50.24             |            |                | Rp 38,487.36 | Rp 38,487.36         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 6-May-15  |       |       | 0      | 50.24             |               |                | Rp 38,487.36 | Rp 38,487.36         |
| 7-May-15  |       |       | 0      | 50.24             |               |                | Rp 38,487.36 | Rp 38,487.36         |
| 8-May-15  |       |       | 2.58   | 47.66             |               |                | Rp 36,510.90 | Rp 36,510.90         |
| 9-May-15  |       |       | 0      | 47.66             |               |                | Rp 36,510.90 | Rp 36,510.90         |
| 10-May-15 |       |       | 2.18   | 45.48             |               |                | Rp 34,840.86 | Rp 34,840.86         |
| 11-May-15 |       |       | 0      | 45.48             |               |                | Rp 34,840.86 | Rp 34,840.86         |
| 12-May-15 |       |       | 0      | 45.48             |               |                | Rp 34,840.86 | Rp 34,840.86         |
| 13-May-15 |       |       | 0.43   | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 14-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 15-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 16-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 17-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 18-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 19-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 20-May-15 |       |       | 0      | 45.05             |               |                | Rp 34,511.45 | Rp 34,511.45         |
| 21-May-15 |       |       | 8.42   | 36.63             |               |                | Rp 28,061.14 | Rp 28,061.14         |
| 22-May-15 |       |       | 0      | 36.63             |               |                | Rp 28,061.14 | Rp 28,061.14         |
| 23-May-15 |       |       | 1.5    | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 24-May-15 |       |       | 0      | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 25-May-15 |       |       | 0      | 35.13             |               |                | Rp 26,912.04 | Rp 26,912.04         |
| 26-May-15 |       |       | 8.14   | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 27-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 28-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 29-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 30-May-15 |       |       | 0      | 26.99             |               |                | Rp 20,676.23 | Rp 20,676.23         |
| 31-May-15 |       |       | 1      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 1-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 2-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 3-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 4-Jun-15  |       |       | 0      | 25.99             |               |                | Rp 19,910.16 | Rp 19,910.16         |
| 5-Jun-15  |       |       | 1.78   | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 6-Jun-15  |       |       | 0      | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 7-Jun-15  |       |       | 0      | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 8-Jun-15  |       |       | 0      | 24.21             |               |                | Rp 18,546.55 | Rp 18,546.55         |
| 9-Jun-15  |       |       | 1.74   | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 10-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 11-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 12-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 13-Jun-15 |       |       | 0      | 22.47             |               |                | Rp 17,213.59 | Rp 17,213.59         |
| 14-Jun-15 | 25.57 |       | 17.31  | 5.16              | Rp 131,774.28 |                | Rp 3,952.92  | Rp 135,727.20        |
| 15-Jun-15 |       |       | 0      | 5.16              |               |                | Rp 3,952.92  | Rp 3,952.92          |
| 16-Jun-15 |       |       | 0      | 5.16              |               |                | Rp 3,952.92  | Rp 3,952.92          |
| 17-Jun-15 |       |       | 0      | 5.16              |               |                | Rp 3,952.92  | Rp 3,952.92          |
| 18-Jun-15 |       |       | 1.54   | 3.62              |               |                | Rp 2,773.17  | Rp 2,773.17          |
| 19-Jun-15 |       |       | 0      | 3.62              |               |                | Rp 2,773.17  | Rp 2,773.17          |
| 20-Jun-15 |       |       | 0      | 3.62              |               |                | Rp 2,773.17  | Rp 2,773.17          |
| 21-Jun-15 |       |       | 0      | 3.62              |               |                | Rp 2,773.17  | Rp 2,773.17          |
| 22-Jun-15 |       | 25.57 | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 23-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 24-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 25-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 26-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 27-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 28-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 29-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 30-Jun-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 1-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 2-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 3-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 4-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 5-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 6-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 7-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 8-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 9-Jul-15  |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 10-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 11-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 12-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 13-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 14-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 15-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 16-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 17-Jul-15 |       |       | 0      | 29.19             |               |                | Rp 22,361.58 | Rp 22,361.58         |
| 18-Jul-15 |       |       | 2.12   | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 19-Jul-15 |       |       | 0      | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |
| 20-Jul-15 |       |       | 0      | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |
| 21-Jul-15 |       |       | 0      | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |
| 22-Jul-15 |       |       | 0      | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |
| 23-Jul-15 |       |       | 9.09   | 17.98             |               |                | Rp 13,773.94 | Rp 13,773.94         |
| 24-Jul-15 |       |       | 0      | 17.98             |               |                | Rp 13,773.94 | Rp 13,773.94         |
| 25-Jul-15 |       |       | 0      | 17.98             |               |                | Rp 13,773.94 | Rp 13,773.94         |
| 26-Jul-15 |       |       | 0.45   | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 27-Jul-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 28-Jul-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 29-Jul-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 30-Jul-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 31-Jul-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 1-Aug-15  |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 2-Aug-15  |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 3-Aug-15  |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 4-Aug-15  |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 5-Aug-15  |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 6-Aug-15  |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 7-Aug-15  |       |       | 3.92   | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 8-Aug-15  |       |       | 0      | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 9-Aug-15  |       |       | 0      | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 10-Aug-15 |       |       | 0      | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 11-Aug-15 |       |       | 0      | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 12-Aug-15 |       |       | 0      | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 13-Aug-15 | 17.12 |       | 0      | 13.61             | Rp 131,774.28 |                | Rp 10,426.21 | Rp 142,200.49        |
| 14-Aug-15 |       |       | 0      | 13.61             |               |                | Rp 10,426.21 | Rp 10,426.21         |
| 15-Aug-15 |       | 17.12 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Aug-15 |       |       | 1.45   | 29.28             |               |                | Rp 22,430.53 | Rp 22,430.53         |
| 18-Aug-15 |       |       | 0      | 29.28             |               |                | Rp 22,430.53 | Rp 22,430.53         |
| 19-Aug-15 |       |       | 0      | 29.28             |               |                | Rp 22,430.53 | Rp 22,430.53         |
| 20-Aug-15 |       |       | 3.91   | 25.37             |               |                | Rp 19,435.20 | Rp 19,435.20         |
| 21-Aug-15 |       |       | 9.5    | 15.87             |               |                | Rp 12,157.53 | Rp 12,157.53         |
| 22-Aug-15 |       |       | 0      | 15.87             |               |                | Rp 12,157.53 | Rp 12,157.53         |
| 23-Aug-15 |       |       | 0      | 15.87             |               |                | Rp 12,157.53 | Rp 12,157.53         |
| 24-Aug-15 |       |       | 8.87   | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 25-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 26-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 27-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 28-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 29-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 30-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 31-Aug-15 |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 1-Sep-15  |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 2-Sep-15  |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 3-Sep-15  |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 4-Sep-15  |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 5-Sep-15  |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 6-Sep-15  |       |       | 0      | 7                 |               |                | Rp 5,362.49  | Rp 5,362.49          |
| 7-Sep-15  |       |       | 1.04   | 5.96              |               |                | Rp 4,565.78  | Rp 4,565.78          |
| 8-Sep-15  |       |       | 0      | 5.96              |               |                | Rp 4,565.78  | Rp 4,565.78          |
| 9-Sep-15  |       |       | 0      | 5.96              |               |                | Rp 4,565.78  | Rp 4,565.78          |
| 10-Sep-15 |       |       | 0      | 5.96              |               |                | Rp 4,565.78  | Rp 4,565.78          |
| 11-Sep-15 |       |       | 0.71   | 5.25              |               |                | Rp 4,021.87  | Rp 4,021.87          |
| 12-Sep-15 | 25.48 |       | 0      | 5.25              | Rp 131,774.28 |                | Rp 4,021.87  | Rp 135,796.15        |
| 13-Sep-15 |       |       | 0      | 5.25              |               |                | Rp 4,021.87  | Rp 4,021.87          |
| 14-Sep-15 |       |       | 0      | 5.25              |               |                | Rp 4,021.87  | Rp 4,021.87          |
| 15-Sep-15 |       |       | 0.71   | 4.54              |               |                | Rp 3,477.96  | Rp 3,477.96          |
| 16-Sep-15 |       |       | 0      | 4.54              |               |                | Rp 3,477.96  | Rp 3,477.96          |
| 17-Sep-15 |       |       | 0      | 4.54              |               |                | Rp 3,477.96  | Rp 3,477.96          |
| 18-Sep-15 |       |       | 0      | 4.54              |               |                | Rp 3,477.96  | Rp 3,477.96          |
| 19-Sep-15 |       |       | 0      | 4.54              |               |                | Rp 3,477.96  | Rp 3,477.96          |
| 20-Sep-15 |       | 25.48 | 0      | 30.02             |               |                | Rp 22,997.42 | Rp 22,997.42         |
| 21-Sep-15 |       |       | 0      | 30.02             |               |                | Rp 22,997.42 | Rp 22,997.42         |
| 22-Sep-15 |       |       | 0.92   | 29.1              |               |                | Rp 22,292.64 | Rp 22,292.64         |
| 23-Sep-15 |       |       | 3.17   | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 24-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 25-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 26-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 27-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 28-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 29-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |
| 30-Sep-15 |       |       | 0      | 25.93             |               |                | Rp 19,864.20 | Rp 19,864.20         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 1-Oct-15  |       |    | 3.63   | 22.3              |               |                 | Rp 17,083.36 | Rp 17,083.36         |
| 2-Oct-15  |       |    | 0      | 22.3              |               |                 | Rp 17,083.36 | Rp 17,083.36         |
| 3-Oct-15  |       |    | 0      | 22.3              |               |                 | Rp 17,083.36 | Rp 17,083.36         |
| 4-Oct-15  |       |    | 2.37   | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 5-Oct-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 6-Oct-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 7-Oct-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 8-Oct-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 9-Oct-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 10-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 11-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 12-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 13-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 14-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 15-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 16-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 17-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 18-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 19-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 20-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 21-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 22-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 23-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 24-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 25-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 26-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 27-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 28-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 29-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 30-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 31-Oct-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 1-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 2-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 3-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 4-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 5-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 6-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 7-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 8-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 9-Nov-15  |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 10-Nov-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 11-Nov-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 12-Nov-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 13-Nov-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 14-Nov-15 |       |    | 0      | 19.93             |               |                 | Rp 15,267.78 | Rp 15,267.78         |
| 15-Nov-15 |       |    | 1.01   | 18.92             |               |                 | Rp 14,494.04 | Rp 14,494.04         |
| 16-Nov-15 |       |    | 0      | 18.92             |               |                 | Rp 14,494.04 | Rp 14,494.04         |
| 17-Nov-15 |       |    | 16.38  | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 18-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 19-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 20-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 21-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 22-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 23-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 24-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 25-Nov-15 |       |    | 0      | 2.54              |               |                 | Rp 1,945.82  | Rp 1,945.82          |
| 26-Nov-15 |       |    | 1.05   | 1.49              |               |                 | Rp 1,141.44  | Rp 1,141.44          |
| 27-Nov-15 |       |    | 0.61   | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 28-Nov-15 |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 29-Nov-15 |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 30-Nov-15 |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 1-Dec-15  |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 2-Dec-15  |       |    | 7.8    | -6.92             |               | Rp 1,556,301.60 | Rp 674.14    | Rp 1,556,975.74      |
| 3-Dec-15  |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 4-Dec-15  |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 5-Dec-15  |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 6-Dec-15  |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 7-Dec-15  |       |    | 8.77   | -7.89             |               | Rp 1,556,301.60 | Rp 674.14    | Rp 1,556,975.74      |
| 8-Dec-15  |       |    | 2.78   | -1.9              |               | Rp 1,556,301.60 | Rp 674.14    | Rp 1,556,975.74      |
| 9-Dec-15  |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 10-Dec-15 |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 11-Dec-15 | 29.85 |    | 0      | 0.88              | Rp 131,774.28 |                 | Rp 674.14    | Rp 132,448.42        |
| 12-Dec-15 |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |
| 13-Dec-15 |       |    | 0      | 0.88              |               |                 | Rp 674.14    | Rp 674.14            |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost     | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|------------|----------------|------------------|----------------------|
| 14-Dec-15 |       | 29.85 | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 15-Dec-15 |       |       | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 16-Dec-15 |       |       | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 17-Dec-15 |       |       | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 18-Dec-15 |       |       | 0.79   | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 19-Dec-15 |       |       | 0      | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 20-Dec-15 |       |       | 0      | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 21-Dec-15 |       |       | 0      | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 22-Dec-15 |       |       | 0      | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 23-Dec-15 |       |       | 0      | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 24-Dec-15 |       |       | 0      | 29.94             |            |                | Rp 22,936.14     | Rp 22,936.14         |
| 25-Dec-15 |       |       | 17.29  | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
| 26-Dec-15 |       |       | 0      | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
| 27-Dec-15 |       |       | 0      | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
| 28-Dec-15 |       |       | 0      | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
| 29-Dec-15 |       |       | 0      | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
| 30-Dec-15 |       |       | 0      | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
| 31-Dec-15 |       |       | 0      | 12.65             |            |                | Rp 9,690.79      | Rp 9,690.79          |
|           |       |       |        |                   |            |                | Rp 14,920,754.96 |                      |

## Replication 5

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 6.11   | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 4-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 5-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 6-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 7-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 8-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 9-Jan-15  |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 10-Jan-15 |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 11-Jan-15 |       |    | 0      | 78.64             |            |                | Rp 60,243.74 | Rp 60,243.74         |
| 12-Jan-15 |       |    | 8.43   | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 13-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 14-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 15-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 16-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 17-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 18-Jan-15 |       |    | 0      | 70.21             |            |                | Rp 53,785.77 | Rp 53,785.77         |
| 19-Jan-15 |       |    | 0.84   | 69.37             |            |                | Rp 53,142.28 | Rp 53,142.28         |
| 20-Jan-15 |       |    | 0      | 69.37             |            |                | Rp 53,142.28 | Rp 53,142.28         |
| 21-Jan-15 |       |    | 2.63   | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 22-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 23-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 24-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 25-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 26-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 27-Jan-15 |       |    | 0      | 66.74             |            |                | Rp 51,127.51 | Rp 51,127.51         |
| 28-Jan-15 |       |    | 18.74  | 48                |            |                | Rp 36,771.36 | Rp 36,771.36         |
| 29-Jan-15 |       |    | 0      | 48                |            |                | Rp 36,771.36 | Rp 36,771.36         |
| 30-Jan-15 |       |    | 0.27   | 47.73             |            |                | Rp 36,564.52 | Rp 36,564.52         |
| 31-Jan-15 |       |    | 0      | 47.73             |            |                | Rp 36,564.52 | Rp 36,564.52         |
| 1-Feb-15  |       |    | 1.73   | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 2-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 3-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 4-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 5-Feb-15  |       |    | 0      | 46                |            |                | Rp 35,239.22 | Rp 35,239.22         |
| 6-Feb-15  |       |    | 0.62   | 45.38             |            |                | Rp 34,764.26 | Rp 34,764.26         |
| 7-Feb-15  |       |    | 0      | 45.38             |            |                | Rp 34,764.26 | Rp 34,764.26         |
| 8-Feb-15  |       |    | 1.97   | 43.41             |            |                | Rp 33,255.10 | Rp 33,255.10         |
| 9-Feb-15  |       |    | 0      | 43.41             |            |                | Rp 33,255.10 | Rp 33,255.10         |
| 10-Feb-15 |       |    | 0      | 43.41             |            |                | Rp 33,255.10 | Rp 33,255.10         |
| 11-Feb-15 |       |    | 3.43   | 39.98             |            |                | Rp 30,627.48 | Rp 30,627.48         |
| 12-Feb-15 |       |    | 0      | 39.98             |            |                | Rp 30,627.48 | Rp 30,627.48         |
| 13-Feb-15 |       |    | 0      | 39.98             |            |                | Rp 30,627.48 | Rp 30,627.48         |
| 14-Feb-15 |       |    | 1.87   | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 15-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |
| 16-Feb-15 |       |    | 0      | 38.11             |            |                | Rp 29,194.93 | Rp 29,194.93         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 17-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 18-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 19-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 20-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 21-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 22-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 23-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 24-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 25-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 26-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 27-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 28-Feb-15 |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 1-Mar-15  |       |       | 0      | 38.11             |               |                | Rp 29,194.93 | Rp 29,194.93         |
| 2-Mar-15  |       |       | 0.04   | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 3-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 4-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 5-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 6-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 7-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 8-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 9-Mar-15  |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 10-Mar-15 |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 11-Mar-15 |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 12-Mar-15 |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 13-Mar-15 |       |       | 0      | 38.07             |               |                | Rp 29,164.28 | Rp 29,164.28         |
| 14-Mar-15 |       |       | 3.45   | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 15-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 16-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 17-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 18-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 19-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 20-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 21-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 22-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 23-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 24-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 25-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 26-Mar-15 |       |       | 0      | 34.62             |               |                | Rp 26,521.34 | Rp 26,521.34         |
| 27-Mar-15 |       |       | 4.43   | 30.19             |               |                | Rp 23,127.65 | Rp 23,127.65         |
| 28-Mar-15 |       |       | 0      | 30.19             |               |                | Rp 23,127.65 | Rp 23,127.65         |
| 29-Mar-15 |       |       | 0      | 30.19             |               |                | Rp 23,127.65 | Rp 23,127.65         |
| 30-Mar-15 |       |       | 0      | 30.19             |               |                | Rp 23,127.65 | Rp 23,127.65         |
| 31-Mar-15 |       |       | 0      | 30.19             |               |                | Rp 23,127.65 | Rp 23,127.65         |
| 1-Apr-15  |       |       | 0      | 30.19             |               |                | Rp 23,127.65 | Rp 23,127.65         |
| 2-Apr-15  |       |       | 1.38   | 28.81             |               |                | Rp 22,070.48 | Rp 22,070.48         |
| 3-Apr-15  |       |       | 0      | 28.81             |               |                | Rp 22,070.48 | Rp 22,070.48         |
| 4-Apr-15  |       |       | 0      | 28.81             |               |                | Rp 22,070.48 | Rp 22,070.48         |
| 5-Apr-15  |       |       | 0      | 28.81             |               |                | Rp 22,070.48 | Rp 22,070.48         |
| 6-Apr-15  |       |       | 8.33   | 20.48             |               |                | Rp 15,689.11 | Rp 15,689.11         |
| 7-Apr-15  |       |       | 0      | 20.48             |               |                | Rp 15,689.11 | Rp 15,689.11         |
| 8-Apr-15  |       |       | 0      | 20.48             |               |                | Rp 15,689.11 | Rp 15,689.11         |
| 9-Apr-15  |       |       | 0      | 20.48             |               |                | Rp 15,689.11 | Rp 15,689.11         |
| 10-Apr-15 |       |       | 0      | 20.48             |               |                | Rp 15,689.11 | Rp 15,689.11         |
| 11-Apr-15 |       |       | 2.66   | 17.82             |               |                | Rp 13,651.37 | Rp 13,651.37         |
| 12-Apr-15 |       |       | 0      | 17.82             |               |                | Rp 13,651.37 | Rp 13,651.37         |
| 13-Apr-15 |       |       | 0      | 17.82             |               |                | Rp 13,651.37 | Rp 13,651.37         |
| 14-Apr-15 |       |       | 0      | 17.82             |               |                | Rp 13,651.37 | Rp 13,651.37         |
| 15-Apr-15 | 12.91 |       | 0      | 17.82             | Rp 131,774.28 |                | Rp 13,651.37 | Rp 145,425.65        |
| 16-Apr-15 |       | 12.91 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Apr-15 |       |       | 3.66   | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |
| 18-Apr-15 |       |       | 0      | 27.07             |               |                | Rp 20,737.51 | Rp 20,737.51         |
| 19-Apr-15 |       |       | 1.4    | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 20-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 21-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 22-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 23-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 24-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 25-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 26-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 27-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 28-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 29-Apr-15 |       |       | 0      | 25.67             |               |                | Rp 19,665.02 | Rp 19,665.02         |
| 30-Apr-15 |       |       | 1.48   | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |
| 1-May-15  |       |       | 0      | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 2-May-15  |       |       | 0      | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |
| 3-May-15  |       |       | 0      | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |
| 4-May-15  |       |       | 0      | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |
| 5-May-15  |       |       | 0      | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |
| 6-May-15  |       |       | 0      | 24.19             |               |                | Rp 18,531.23 | Rp 18,531.23         |
| 7-May-15  |       |       | 1.11   | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 8-May-15  |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 9-May-15  |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 10-May-15 |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 11-May-15 |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 12-May-15 |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 13-May-15 |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 14-May-15 |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 15-May-15 |       |       | 0      | 23.08             |               |                | Rp 17,680.90 | Rp 17,680.90         |
| 16-May-15 |       |       | 1.92   | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 17-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 18-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 19-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 20-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 21-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 22-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 23-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 24-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 25-May-15 |       |       | 0      | 21.16             |               |                | Rp 16,210.04 | Rp 16,210.04         |
| 26-May-15 |       |       | 1.89   | 19.27             |               |                | Rp 14,762.17 | Rp 14,762.17         |
| 27-May-15 |       |       | 2.07   | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 28-May-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 29-May-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 30-May-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 31-May-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 1-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 2-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 3-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 4-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 5-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 6-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 7-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 8-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 9-Jun-15  |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 10-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 11-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 12-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 13-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 14-Jun-15 | 13.53 |       | 0      | 17.2              | Rp 131,774.28 |                | Rp 13,176.40 | Rp 144,950.68        |
| 15-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 16-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 17-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 18-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 19-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 20-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 21-Jun-15 |       |       | 0      | 17.2              |               |                | Rp 13,176.40 | Rp 13,176.40         |
| 22-Jun-15 |       | 13.53 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 23-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 24-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 25-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 26-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 27-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 28-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 29-Jun-15 |       |       | 4.15   | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 30-Jun-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 1-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 2-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 3-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 4-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 5-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 6-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 7-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 8-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 9-Jul-15  |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 10-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 11-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 12-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 13-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 14-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 15-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 16-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 17-Jul-15 |       |       | 0      | 26.58             |               |                | Rp 20,362.14 | Rp 20,362.14         |
| 18-Jul-15 |       |       | 3.3    | 23.28             |               |                | Rp 17,834.11 | Rp 17,834.11         |
| 19-Jul-15 |       |       | 0      | 23.28             |               |                | Rp 17,834.11 | Rp 17,834.11         |
| 20-Jul-15 |       |       | 0      | 23.28             |               |                | Rp 17,834.11 | Rp 17,834.11         |
| 21-Jul-15 |       |       | 0      | 23.28             |               |                | Rp 17,834.11 | Rp 17,834.11         |
| 22-Jul-15 |       |       | 0.46   | 22.82             |               |                | Rp 17,481.72 | Rp 17,481.72         |
| 23-Jul-15 |       |       | 0      | 22.82             |               |                | Rp 17,481.72 | Rp 17,481.72         |
| 24-Jul-15 |       |       | 3.58   | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 25-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 26-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 27-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 28-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 29-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 30-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 31-Jul-15 |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 1-Aug-15  |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 2-Aug-15  |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 3-Aug-15  |       |       | 0      | 19.24             |               |                | Rp 14,739.19 | Rp 14,739.19         |
| 4-Aug-15  |       |       | 6.63   | 12.61             |               |                | Rp 9,660.14  | Rp 9,660.14          |
| 5-Aug-15  |       |       | 0      | 12.61             |               |                | Rp 9,660.14  | Rp 9,660.14          |
| 6-Aug-15  |       |       | 0      | 12.61             |               |                | Rp 9,660.14  | Rp 9,660.14          |
| 7-Aug-15  |       |       | 0      | 12.61             |               |                | Rp 9,660.14  | Rp 9,660.14          |
| 8-Aug-15  |       |       | 0      | 12.61             |               |                | Rp 9,660.14  | Rp 9,660.14          |
| 9-Aug-15  |       |       | 0.64   | 11.97             |               |                | Rp 9,169.86  | Rp 9,169.86          |
| 10-Aug-15 |       |       | 0      | 11.97             |               |                | Rp 9,169.86  | Rp 9,169.86          |
| 11-Aug-15 |       |       | 0      | 11.97             |               |                | Rp 9,169.86  | Rp 9,169.86          |
| 12-Aug-15 |       |       | 3.96   | 8.01              |               |                | Rp 6,136.22  | Rp 6,136.22          |
| 13-Aug-15 | 22.72 |       | 0      | 8.01              | Rp 131,774.28 |                | Rp 6,136.22  | Rp 137,910.50        |
| 14-Aug-15 |       |       | 0      | 8.01              |               |                | Rp 6,136.22  | Rp 6,136.22          |
| 15-Aug-15 |       |       | 0.54   | 7.47              |               |                | Rp 5,722.54  | Rp 5,722.54          |
| 16-Aug-15 |       |       | 0.68   | 6.79              |               |                | Rp 5,201.62  | Rp 5,201.62          |
| 17-Aug-15 |       | 22.72 | 0      | 29.51             |               |                | Rp 22,606.73 | Rp 22,606.73         |
| 18-Aug-15 |       |       | 0      | 29.51             |               |                | Rp 22,606.73 | Rp 22,606.73         |
| 19-Aug-15 |       |       | 0      | 29.51             |               |                | Rp 22,606.73 | Rp 22,606.73         |
| 20-Aug-15 |       |       | 9.41   | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 21-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 22-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 23-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 24-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 25-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 26-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 27-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 28-Aug-15 |       |       | 0      | 20.1              |               |                | Rp 15,398.01 | Rp 15,398.01         |
| 29-Aug-15 |       |       | 0.21   | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 30-Aug-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 31-Aug-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 1-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 2-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 3-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 4-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 5-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 6-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 7-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 8-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 9-Sep-15  |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 10-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 11-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 12-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 13-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 14-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 15-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 16-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 17-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 18-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 19-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 20-Sep-15 |       |       | 0      | 19.89             |               |                | Rp 15,237.13 | Rp 15,237.13         |
| 21-Sep-15 |       |       | 0.37   | 19.52             |               |                | Rp 14,953.69 | Rp 14,953.69         |
| 22-Sep-15 |       |       | 0      | 19.52             |               |                | Rp 14,953.69 | Rp 14,953.69         |
| 23-Sep-15 |       |       | 0      | 19.52             |               |                | Rp 14,953.69 | Rp 14,953.69         |
| 24-Sep-15 |       |       | 7.58   | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 25-Sep-15 |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 26-Sep-15 |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 27-Sep-15 |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 28-Sep-15 |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 29-Sep-15 |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 30-Sep-15 |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 1-Oct-15  |       |       | 0      | 11.94             |               |                | Rp 9,146.88  | Rp 9,146.88          |
| 2-Oct-15  |       |       | 1.13   | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 3-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 4-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 5-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 6-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 7-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 8-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 9-Oct-15  |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 10-Oct-15 |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 11-Oct-15 |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 12-Oct-15 | 19.92 |       | 0      | 10.81             | Rp 131,774.28 |                | Rp 8,281.22  | Rp 140,055.50        |
| 13-Oct-15 |       |       | 0      | 10.81             |               |                | Rp 8,281.22  | Rp 8,281.22          |
| 14-Oct-15 |       | 19.92 | 3.27   | 27.46             |               |                | Rp 21,036.28 | Rp 21,036.28         |
| 15-Oct-15 |       |       | 0      | 27.46             |               |                | Rp 21,036.28 | Rp 21,036.28         |
| 16-Oct-15 |       |       | 0      | 27.46             |               |                | Rp 21,036.28 | Rp 21,036.28         |
| 17-Oct-15 |       |       | 0      | 27.46             |               |                | Rp 21,036.28 | Rp 21,036.28         |
| 18-Oct-15 |       |       | 9.93   | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 19-Oct-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 20-Oct-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 21-Oct-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 22-Oct-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 23-Oct-15 |       |       | 0      | 17.53             |               |                | Rp 13,429.21 | Rp 13,429.21         |
| 24-Oct-15 |       |       | 0.39   | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 25-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 26-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 27-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 28-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 29-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 30-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 31-Oct-15 |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 1-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 2-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 3-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 4-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 5-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 6-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 7-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 8-Nov-15  |       |       | 0      | 17.14             |               |                | Rp 13,130.44 | Rp 13,130.44         |
| 9-Nov-15  |       |       | 0.44   | 16.7              |               |                | Rp 12,793.37 | Rp 12,793.37         |
| 10-Nov-15 |       |       | 0      | 16.7              |               |                | Rp 12,793.37 | Rp 12,793.37         |
| 11-Nov-15 | 14.03 |       | 0      | 16.7              | Rp 131,774.28 |                | Rp 12,793.37 | Rp 144,567.65        |
| 12-Nov-15 |       |       | 0      | 16.7              |               |                | Rp 12,793.37 | Rp 12,793.37         |
| 13-Nov-15 |       | 14.03 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 14-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 20-Nov-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 21-Nov-15 |       |       | 0.94   | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 22-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 23-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 24-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 25-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 26-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 27-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 28-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 29-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 30-Nov-15 |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 1-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 2-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 3-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 4-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 5-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 6-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 7-Dec-15  |       |       | 0      | 29.79             |               |                | Rp 22,821.23 | Rp 22,821.23         |
| 8-Dec-15  |       |       | 5.03   | 24.76             |               |                | Rp 18,967.89 | Rp 18,967.89         |
| 9-Dec-15  |       |       | 0      | 24.76             |               |                | Rp 18,967.89 | Rp 18,967.89         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 10-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 11-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 12-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 13-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 14-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 15-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 16-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 17-Dec-15 |       |    | 0      | 24.76             |            |                | Rp 18,967.89 | Rp 18,967.89         |
| 18-Dec-15 |       |    | 1.09   | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 19-Dec-15 |       |    | 0      | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 20-Dec-15 |       |    | 0      | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 21-Dec-15 |       |    | 0      | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 22-Dec-15 |       |    | 0      | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 23-Dec-15 |       |    | 0      | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 24-Dec-15 |       |    | 0      | 23.67             |            |                | Rp 18,132.88 | Rp 18,132.88         |
| 25-Dec-15 |       |    | 0.02   | 23.65             |            |                | Rp 18,117.56 | Rp 18,117.56         |
| 26-Dec-15 |       |    | 0.64   | 23.01             |            |                | Rp 17,627.27 | Rp 17,627.27         |
| 27-Dec-15 |       |    | 0      | 23.01             |            |                | Rp 17,627.27 | Rp 17,627.27         |
| 28-Dec-15 |       |    | 2.58   | 20.43             |            |                | Rp 15,650.81 | Rp 15,650.81         |
| 29-Dec-15 |       |    | 0      | 20.43             |            |                | Rp 15,650.81 | Rp 15,650.81         |
| 30-Dec-15 |       |    | 0      | 20.43             |            |                | Rp 15,650.81 | Rp 15,650.81         |
| 31-Dec-15 |       |    | 0      | 20.43             |            |                | Rp 15,650.81 | Rp 15,650.81         |
|           |       |    |        |                   |            |                |              | Rp 8,580,173.09      |

## Replication 6

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 9-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 10-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 11-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 12-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 13-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 14-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 15-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 16-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 17-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 18-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 19-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 20-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 21-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 22-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 23-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 24-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 25-Jan-15 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 26-Jan-15 |       |    | 2.6    | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 27-Jan-15 |       |    | 0      | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 28-Jan-15 |       |    | 0      | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 29-Jan-15 |       |    | 0      | 82.15             |            |                | Rp 62,932.65 | Rp 62,932.65         |
| 30-Jan-15 |       |    | 10.95  | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 31-Jan-15 |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 1-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 2-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 3-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 4-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 5-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 6-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 7-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 8-Feb-15  |       |    | 0      | 71.2              |            |                | Rp 54,544.18 | Rp 54,544.18         |
| 9-Feb-15  |       |    | 0.03   | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 10-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 11-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 12-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 13-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 14-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 15-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 16-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 17-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 18-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 19-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 20-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 21-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 22-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 23-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 24-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 25-Feb-15 |       |    | 0      | 71.17             |            |                | Rp 54,521.20 | Rp 54,521.20         |
| 26-Feb-15 |       |    | 1.27   | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 27-Feb-15 |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 28-Feb-15 |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 1-Mar-15  |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 2-Mar-15  |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 3-Mar-15  |       |    | 0      | 69.9              |            |                | Rp 53,548.29 | Rp 53,548.29         |
| 4-Mar-15  |       |    | 8.42   | 61.48             |            |                | Rp 47,097.98 | Rp 47,097.98         |
| 5-Mar-15  |       |    | 0      | 61.48             |            |                | Rp 47,097.98 | Rp 47,097.98         |
| 6-Mar-15  |       |    | 0      | 61.48             |            |                | Rp 47,097.98 | Rp 47,097.98         |
| 7-Mar-15  |       |    | 7.92   | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 8-Mar-15  |       |    | 0      | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 9-Mar-15  |       |    | 0      | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 10-Mar-15 |       |    | 0      | 53.56             |            |                | Rp 41,030.71 | Rp 41,030.71         |
| 11-Mar-15 |       |    | 0.36   | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 12-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 13-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 14-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 15-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 16-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 17-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 18-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 19-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 20-Mar-15 |       |    | 0      | 53.2              |            |                | Rp 40,754.92 | Rp 40,754.92         |
| 21-Mar-15 |       |    | 2.67   | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 22-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 23-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 24-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 25-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 26-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 27-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 28-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 29-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 30-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 31-Mar-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 1-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 2-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 3-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 4-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 5-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 6-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 7-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 8-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 9-Apr-15  |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 10-Apr-15 |       |    | 0      | 50.53             |            |                | Rp 38,709.52 | Rp 38,709.52         |
| 11-Apr-15 |       |    | 1.09   | 49.44             |            |                | Rp 37,874.50 | Rp 37,874.50         |
| 12-Apr-15 |       |    | 0      | 49.44             |            |                | Rp 37,874.50 | Rp 37,874.50         |
| 13-Apr-15 |       |    | 0.13   | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 14-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 15-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 16-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 17-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 18-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 19-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 20-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 21-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 22-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 23-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 24-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 25-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 26-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |
| 27-Apr-15 |       |    | 0      | 49.31             |            |                | Rp 37,774.91 | Rp 37,774.91         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|-----------------|--------------|----------------------|
| 28-Apr-15 |       |    | 0      | 49.31             |            |                 | Rp 37,774.91 | Rp 37,774.91         |
| 29-Apr-15 |       |    | 0      | 49.31             |            |                 | Rp 37,774.91 | Rp 37,774.91         |
| 30-Apr-15 |       |    | 0      | 49.31             |            |                 | Rp 37,774.91 | Rp 37,774.91         |
| 1-May-15  |       |    | 1.07   | 48.24             |            |                 | Rp 36,955.22 | Rp 36,955.22         |
| 2-May-15  |       |    | 0      | 48.24             |            |                 | Rp 36,955.22 | Rp 36,955.22         |
| 3-May-15  |       |    | 0      | 48.24             |            |                 | Rp 36,955.22 | Rp 36,955.22         |
| 4-May-15  |       |    | 1.77   | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 5-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 6-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 7-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 8-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 9-May-15  |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 10-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 11-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 12-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 13-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 14-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 15-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 16-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 17-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 18-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 19-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 20-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 21-May-15 |       |    | 0      | 46.47             |            |                 | Rp 35,599.27 | Rp 35,599.27         |
| 22-May-15 |       |    | 1.6    | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 23-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 24-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 25-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 26-May-15 |       |    | 0      | 44.87             |            |                 | Rp 34,373.56 | Rp 34,373.56         |
| 27-May-15 |       |    | 3.34   | 41.53             |            |                 | Rp 31,814.89 | Rp 31,814.89         |
| 28-May-15 |       |    | 0      | 41.53             |            |                 | Rp 31,814.89 | Rp 31,814.89         |
| 29-May-15 |       |    | 0.97   | 40.56             |            |                 | Rp 31,071.80 | Rp 31,071.80         |
| 30-May-15 |       |    | 0      | 40.56             |            |                 | Rp 31,071.80 | Rp 31,071.80         |
| 31-May-15 |       |    | 1.77   | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 1-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 2-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 3-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 4-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 5-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 6-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 7-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 8-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 9-Jun-15  |       |    | 0      | 38.79             |            |                 | Rp 29,715.86 | Rp 29,715.86         |
| 10-Jun-15 |       |    | 0.9    | 37.89             |            |                 | Rp 29,026.39 | Rp 29,026.39         |
| 11-Jun-15 |       |    | 0      | 37.89             |            |                 | Rp 29,026.39 | Rp 29,026.39         |
| 12-Jun-15 |       |    | 0      | 37.89             |            |                 | Rp 29,026.39 | Rp 29,026.39         |
| 13-Jun-15 |       |    | 1.17   | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 14-Jun-15 |       |    | 0      | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 15-Jun-15 |       |    | 0      | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 16-Jun-15 |       |    | 0      | 36.72             |            |                 | Rp 28,130.09 | Rp 28,130.09         |
| 17-Jun-15 |       |    | 18.9   | 17.82             |            |                 | Rp 13,651.37 | Rp 13,651.37         |
| 18-Jun-15 |       |    | 2.05   | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 19-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 20-Jun-15 |       |    | 19.77  | -4                |            | Rp 1,556,301.60 | Rp 12,080.92 | Rp 1,568,382.52      |
| 21-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 22-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 23-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 24-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 25-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 26-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 27-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 28-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 29-Jun-15 |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 30-Jun-15 |       |    | 17.67  | -1.9              |            | Rp 1,556,301.60 | Rp 12,080.92 | Rp 1,568,382.52      |
| 1-Jul-15  |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 2-Jul-15  |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 3-Jul-15  |       |    | 0      | 15.77             |            |                 | Rp 12,080.92 | Rp 12,080.92         |
| 4-Jul-15  |       |    | 2.82   | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 5-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 6-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 7-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 8-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 9-Jul-15  |       |    | 0      | 12.95             |            |                 | Rp 9,920.61  | Rp 9,920.61          |
| 10-Jul-15 |       |    | 0.46   | 12.49             |            |                 | Rp 9,568.21  | Rp 9,568.21          |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 11-Jul-15 |       |       | 0      | 12.49             |               |                | Rp 9,568.21  | Rp 9,568.21          |
| 12-Jul-15 |       |       | 0      | 12.49             |               |                | Rp 9,568.21  | Rp 9,568.21          |
| 13-Jul-15 |       |       | 0.41   | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 14-Jul-15 | 18.65 |       | 0      | 12.08             | Rp 131,774.28 |                | Rp 9,254.13  | Rp 141,028.41        |
| 15-Jul-15 |       |       | 0      | 12.08             |               |                | Rp 9,254.13  | Rp 9,254.13          |
| 16-Jul-15 |       | 18.65 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Jul-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Jul-15 |       |       | 3.59   | 27.14             |               |                | Rp 20,791.14 | Rp 20,791.14         |
| 19-Jul-15 |       |       | 0      | 27.14             |               |                | Rp 20,791.14 | Rp 20,791.14         |
| 20-Jul-15 |       |       | 0      | 27.14             |               |                | Rp 20,791.14 | Rp 20,791.14         |
| 21-Jul-15 |       |       | 0      | 27.14             |               |                | Rp 20,791.14 | Rp 20,791.14         |
| 22-Jul-15 |       |       | 0.03   | 27.11             |               |                | Rp 20,768.16 | Rp 20,768.16         |
| 23-Jul-15 |       |       | 0      | 27.11             |               |                | Rp 20,768.16 | Rp 20,768.16         |
| 24-Jul-15 |       |       | 3.99   | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 25-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 26-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 27-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 28-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 29-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 30-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 31-Jul-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 1-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 2-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 3-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 4-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 5-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 6-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 7-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 8-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 9-Aug-15  |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 10-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 11-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 12-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 13-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 14-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 15-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 16-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 17-Aug-15 |       |       | 0      | 23.12             |               |                | Rp 17,711.54 | Rp 17,711.54         |
| 18-Aug-15 |       |       | 6.58   | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 19-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 20-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 21-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 22-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 23-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 24-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 25-Aug-15 |       |       | 0      | 16.54             |               |                | Rp 12,670.80 | Rp 12,670.80         |
| 26-Aug-15 |       |       | 1.3    | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 27-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 28-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 29-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 30-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 31-Aug-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 1-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 2-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 3-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 4-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 5-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 6-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 7-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 8-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 9-Sep-15  |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 10-Sep-15 |       |       | 0      | 15.24             |               |                | Rp 11,674.91 | Rp 11,674.91         |
| 11-Sep-15 |       |       | 1.94   | 13.3              |               |                | Rp 10,188.73 | Rp 10,188.73         |
| 12-Sep-15 | 17.43 |       | 0      | 13.3              | Rp 131,774.28 |                | Rp 10,188.73 | Rp 141,963.01        |
| 13-Sep-15 |       | 17.43 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 14-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Sep-15 |       |       | 3.83   | 26.9              |               |                | Rp 20,607.28 | Rp 20,607.28         |
| 18-Sep-15 |       |       | 0      | 26.9              |               |                | Rp 20,607.28 | Rp 20,607.28         |
| 19-Sep-15 |       |       | 0      | 26.9              |               |                | Rp 20,607.28 | Rp 20,607.28         |
| 20-Sep-15 |       |       | 0      | 26.9              |               |                | Rp 20,607.28 | Rp 20,607.28         |
| 21-Sep-15 |       |       | 2.2    | 24.7              |               |                | Rp 18,921.93 | Rp 18,921.93         |
| 22-Sep-15 |       |       | 0      | 24.7              |               |                | Rp 18,921.93 | Rp 18,921.93         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 23-Sep-15 |       |       | 0      | 24.7              |               |                | Rp 18,921.93 | Rp 18,921.93         |
| 24-Sep-15 |       |       | 0      | 24.7              |               |                | Rp 18,921.93 | Rp 18,921.93         |
| 25-Sep-15 |       |       | 1.53   | 23.17             |               |                | Rp 17,749.84 | Rp 17,749.84         |
| 26-Sep-15 |       |       | 0      | 23.17             |               |                | Rp 17,749.84 | Rp 17,749.84         |
| 27-Sep-15 |       |       | 0      | 23.17             |               |                | Rp 17,749.84 | Rp 17,749.84         |
| 28-Sep-15 |       |       | 0      | 23.17             |               |                | Rp 17,749.84 | Rp 17,749.84         |
| 29-Sep-15 |       |       | 0      | 23.17             |               |                | Rp 17,749.84 | Rp 17,749.84         |
| 30-Sep-15 |       |       | 1.55   | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 1-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 2-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 3-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 4-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 5-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 6-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 7-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 8-Oct-15  |       |       | 0      | 21.62             |               |                | Rp 16,562.43 | Rp 16,562.43         |
| 9-Oct-15  |       |       | 3.62   | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 10-Oct-15 |       |       | 0      | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 11-Oct-15 |       |       | 0      | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 12-Oct-15 |       |       | 0      | 18                |               |                | Rp 13,789.26 | Rp 13,789.26         |
| 13-Oct-15 |       |       | 1.95   | 16.05             |               |                | Rp 12,295.42 | Rp 12,295.42         |
| 14-Oct-15 |       |       | 0      | 16.05             |               |                | Rp 12,295.42 | Rp 12,295.42         |
| 15-Oct-15 |       |       | 0      | 16.05             |               |                | Rp 12,295.42 | Rp 12,295.42         |
| 16-Oct-15 |       |       | 0      | 16.05             |               |                | Rp 12,295.42 | Rp 12,295.42         |
| 17-Oct-15 |       |       | 0      | 16.05             |               |                | Rp 12,295.42 | Rp 12,295.42         |
| 18-Oct-15 |       |       | 0      | 16.05             |               |                | Rp 12,295.42 | Rp 12,295.42         |
| 19-Oct-15 |       |       | 3.59   | 12.46             |               |                | Rp 9,545.23  | Rp 9,545.23          |
| 20-Oct-15 |       |       | 0      | 12.46             |               |                | Rp 9,545.23  | Rp 9,545.23          |
| 21-Oct-15 |       |       | 2.92   | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 22-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 23-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 24-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 25-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 26-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 27-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 28-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 29-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 30-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 31-Oct-15 |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 1-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 2-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 3-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 4-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 5-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 6-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 7-Nov-15  |       |       | 0      | 9.54              |               |                | Rp 7,308.31  | Rp 7,308.31          |
| 8-Nov-15  |       |       | 0.38   | 9.16              |               |                | Rp 7,017.20  | Rp 7,017.20          |
| 9-Nov-15  |       |       | 0      | 9.16              |               |                | Rp 7,017.20  | Rp 7,017.20          |
| 10-Nov-15 |       |       | 0      | 9.16              |               |                | Rp 7,017.20  | Rp 7,017.20          |
| 11-Nov-15 | 21.57 |       | 0      | 9.16              | Rp 131,774.28 |                | Rp 7,017.20  | Rp 138,791.48        |
| 12-Nov-15 |       |       | 0      | 9.16              |               |                | Rp 7,017.20  | Rp 7,017.20          |
| 13-Nov-15 |       |       | 0      | 9.16              |               |                | Rp 7,017.20  | Rp 7,017.20          |
| 14-Nov-15 |       |       | 8.56   | 0.6               |               |                | Rp 459.64    | Rp 459.64            |
| 15-Nov-15 |       | 21.57 | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 16-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 17-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 18-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 19-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 20-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 21-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 22-Nov-15 |       |       | 0      | 22.17             |               |                | Rp 16,983.77 | Rp 16,983.77         |
| 23-Nov-15 |       |       | 1.11   | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 24-Nov-15 |       |       | 0      | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 25-Nov-15 |       |       | 0      | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 26-Nov-15 |       |       | 0      | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 27-Nov-15 |       |       | 0      | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 28-Nov-15 |       |       | 0      | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 29-Nov-15 |       |       | 0      | 21.06             |               |                | Rp 16,133.43 | Rp 16,133.43         |
| 30-Nov-15 |       |       | 0.8    | 20.26             |               |                | Rp 15,520.58 | Rp 15,520.58         |
| 1-Dec-15  |       |       | 4.35   | 15.91             |               |                | Rp 12,188.17 | Rp 12,188.17         |
| 2-Dec-15  |       |       | 0      | 15.91             |               |                | Rp 12,188.17 | Rp 12,188.17         |
| 3-Dec-15  |       |       | 0      | 15.91             |               |                | Rp 12,188.17 | Rp 12,188.17         |
| 4-Dec-15  |       |       | 0      | 15.91             |               |                | Rp 12,188.17 | Rp 12,188.17         |
| 5-Dec-15  |       |       | 0      | 15.91             |               |                | Rp 12,188.17 | Rp 12,188.17         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 6-Dec-15  |       |       | 4.64   | 11.27             |               |                | Rp 8,633.61  | Rp 8,633.61          |
| 7-Dec-15  |       |       | 0      | 11.27             |               |                | Rp 8,633.61  | Rp 8,633.61          |
| 8-Dec-15  |       |       | 0      | 11.27             |               |                | Rp 8,633.61  | Rp 8,633.61          |
| 9-Dec-15  |       |       | 0      | 11.27             |               |                | Rp 8,633.61  | Rp 8,633.61          |
| 10-Dec-15 |       |       | 0      | 11.27             |               |                | Rp 8,633.61  | Rp 8,633.61          |
| 11-Dec-15 | 19.46 |       | 0      | 11.27             | Rp 131,774.28 |                | Rp 8,633.61  | Rp 140,407.89        |
| 12-Dec-15 |       | 19.46 | 9.66   | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 13-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 14-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 15-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 16-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 17-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 18-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 19-Dec-15 |       |       | 0      | 21.07             |               |                | Rp 16,141.09 | Rp 16,141.09         |
| 20-Dec-15 |       |       | 1.9    | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 21-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 22-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 23-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 24-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 25-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 26-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 27-Dec-15 |       |       | 0      | 19.17             |               |                | Rp 14,685.56 | Rp 14,685.56         |
| 28-Dec-15 |       |       | 9.97   | 9.2               |               |                | Rp 7,047.84  | Rp 7,047.84          |
| 29-Dec-15 |       |       | 0      | 9.2               |               |                | Rp 7,047.84  | Rp 7,047.84          |
| 30-Dec-15 |       |       | 0      | 9.2               |               |                | Rp 7,047.84  | Rp 7,047.84          |
| 31-Dec-15 |       |       | 0      | 9.2               |               |                | Rp 7,047.84  | Rp 7,047.84          |
|           |       |       |        |                   |               |                |              | Rp 13,910,822.15     |

## Replication 7

| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 31-Dec-14 |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 1-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 2-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 3-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 4-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 5-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 6-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 7-Jan-15  |       |    | 0      | 84.75             |            |                | Rp 64,924.43 | Rp 64,924.43         |
| 8-Jan-15  |       |    | 0.03   | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 9-Jan-15  |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 10-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 11-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 12-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 13-Jan-15 |       |    | 0      | 84.72             |            |                | Rp 64,901.45 | Rp 64,901.45         |
| 14-Jan-15 |       |    | 1.71   | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 15-Jan-15 |       |    | 0      | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 16-Jan-15 |       |    | 0      | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 17-Jan-15 |       |    | 0      | 83.01             |            |                | Rp 63,591.47 | Rp 63,591.47         |
| 18-Jan-15 |       |    | 0.12   | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 19-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 20-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 21-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 22-Jan-15 |       |    | 0      | 82.89             |            |                | Rp 63,499.54 | Rp 63,499.54         |
| 23-Jan-15 |       |    | 0.6    | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 24-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 25-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 26-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 27-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 28-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 29-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 30-Jan-15 |       |    | 0      | 82.29             |            |                | Rp 63,039.90 | Rp 63,039.90         |
| 31-Jan-15 |       |    | 0.89   | 81.4              |            |                | Rp 62,358.10 | Rp 62,358.10         |
| 1-Feb-15  |       |    | 0      | 81.4              |            |                | Rp 62,358.10 | Rp 62,358.10         |
| 2-Feb-15  |       |    | 0.18   | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 3-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 4-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 5-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 6-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 7-Feb-15  |       |    | 0      | 81.22             |            |                | Rp 62,220.21 | Rp 62,220.21         |
| 8-Feb-15  |       |    | 18.85  | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|--------------|----------------------|
| 9-Feb-15  |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 10-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 11-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 12-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 13-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 14-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 15-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 16-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 17-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 18-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 19-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 20-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 21-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 22-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 23-Feb-15 |       |    | 0      | 62.37             |            |                | Rp 47,779.79 | Rp 47,779.79         |
| 24-Feb-15 |       |    | 0.77   | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 25-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 26-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 27-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 28-Feb-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 1-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 2-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 3-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 4-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 5-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 6-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 7-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 8-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 9-Mar-15  |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 10-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 11-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 12-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 13-Mar-15 |       |    | 0      | 61.6              |            |                | Rp 47,189.91 | Rp 47,189.91         |
| 14-Mar-15 |       |    | 1.31   | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 15-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 16-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 17-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 18-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 19-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 20-Mar-15 |       |    | 0      | 60.29             |            |                | Rp 46,186.36 | Rp 46,186.36         |
| 21-Mar-15 |       |    | 0.69   | 59.6              |            |                | Rp 45,657.77 | Rp 45,657.77         |
| 22-Mar-15 |       |    | 0      | 59.6              |            |                | Rp 45,657.77 | Rp 45,657.77         |
| 23-Mar-15 |       |    | 0      | 59.6              |            |                | Rp 45,657.77 | Rp 45,657.77         |
| 24-Mar-15 |       |    | 0.87   | 58.73             |            |                | Rp 44,991.29 | Rp 44,991.29         |
| 25-Mar-15 |       |    | 0      | 58.73             |            |                | Rp 44,991.29 | Rp 44,991.29         |
| 26-Mar-15 |       |    | 0.08   | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 27-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 28-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 29-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 30-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 31-Mar-15 |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 1-Apr-15  |       |    | 0      | 58.65             |            |                | Rp 44,930.01 | Rp 44,930.01         |
| 2-Apr-15  |       |    | 0.75   | 57.9              |            |                | Rp 44,355.45 | Rp 44,355.45         |
| 3-Apr-15  |       |    | 1.88   | 56.02             |            |                | Rp 42,915.24 | Rp 42,915.24         |
| 4-Apr-15  |       |    | 0      | 56.02             |            |                | Rp 42,915.24 | Rp 42,915.24         |
| 5-Apr-15  |       |    | 0      | 56.02             |            |                | Rp 42,915.24 | Rp 42,915.24         |
| 6-Apr-15  |       |    | 2.48   | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 7-Apr-15  |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 8-Apr-15  |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 9-Apr-15  |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 10-Apr-15 |       |    | 0      | 53.54             |            |                | Rp 41,015.39 | Rp 41,015.39         |
| 11-Apr-15 |       |    | 19.99  | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 12-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 13-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 14-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 15-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 16-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 17-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 18-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 19-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 20-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 21-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 22-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |
| 23-Apr-15 |       |    | 0      | 33.55             |            |                | Rp 25,701.65 | Rp 25,701.65         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 24-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 25-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 26-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 27-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 28-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 29-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 30-Apr-15 |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 1-May-15  |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 2-May-15  |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 3-May-15  |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 4-May-15  |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 5-May-15  |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 6-May-15  |       |       | 0      | 33.55             |               |                | Rp 25,701.65 | Rp 25,701.65         |
| 7-May-15  |       |       | 0.83   | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 8-May-15  |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 9-May-15  |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 10-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 11-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 12-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 13-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 14-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 15-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 16-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 17-May-15 |       |       | 0      | 32.72             |               |                | Rp 25,065.81 | Rp 25,065.81         |
| 18-May-15 |       |       | 1.23   | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 19-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 20-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 21-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 22-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 23-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 24-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 25-May-15 |       |       | 0      | 31.49             |               |                | Rp 24,123.54 | Rp 24,123.54         |
| 26-May-15 |       |       | 1.05   | 30.44             |               |                | Rp 23,319.17 | Rp 23,319.17         |
| 27-May-15 |       |       | 0      | 30.44             |               |                | Rp 23,319.17 | Rp 23,319.17         |
| 28-May-15 |       |       | 0      | 30.44             |               |                | Rp 23,319.17 | Rp 23,319.17         |
| 29-May-15 |       |       | 0.45   | 29.99             |               |                | Rp 22,974.44 | Rp 22,974.44         |
| 30-May-15 |       |       | 0      | 29.99             |               |                | Rp 22,974.44 | Rp 22,974.44         |
| 31-May-15 |       |       | 0      | 29.99             |               |                | Rp 22,974.44 | Rp 22,974.44         |
| 1-Jun-15  |       |       | 0      | 29.99             |               |                | Rp 22,974.44 | Rp 22,974.44         |
| 2-Jun-15  |       |       | 0      | 29.99             |               |                | Rp 22,974.44 | Rp 22,974.44         |
| 3-Jun-15  |       |       | 3.44   | 26.55             |               |                | Rp 20,339.16 | Rp 20,339.16         |
| 4-Jun-15  |       |       | 0      | 26.55             |               |                | Rp 20,339.16 | Rp 20,339.16         |
| 5-Jun-15  |       |       | 3.11   | 23.44             |               |                | Rp 17,956.68 | Rp 17,956.68         |
| 6-Jun-15  |       |       | 0      | 23.44             |               |                | Rp 17,956.68 | Rp 17,956.68         |
| 7-Jun-15  |       |       | 0      | 23.44             |               |                | Rp 17,956.68 | Rp 17,956.68         |
| 8-Jun-15  |       |       | 0.84   | 22.6              |               |                | Rp 17,313.18 | Rp 17,313.18         |
| 9-Jun-15  |       |       | 0      | 22.6              |               |                | Rp 17,313.18 | Rp 17,313.18         |
| 10-Jun-15 |       |       | 0      | 22.6              |               |                | Rp 17,313.18 | Rp 17,313.18         |
| 11-Jun-15 |       |       | 0      | 22.6              |               |                | Rp 17,313.18 | Rp 17,313.18         |
| 12-Jun-15 |       |       | 0      | 22.6              |               |                | Rp 17,313.18 | Rp 17,313.18         |
| 13-Jun-15 |       |       | 3.77   | 18.83             |               |                | Rp 14,425.10 | Rp 14,425.10         |
| 14-Jun-15 | 21.34 |       | 9.44   | 9.39              | Rp 131,774.28 |                | Rp 7,193.40  | Rp 138,967.68        |
| 15-Jun-15 |       | 21.34 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 20-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 21-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 22-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 23-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 24-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 25-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 26-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 27-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 28-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 29-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 30-Jun-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 1-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 2-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 3-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 4-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 5-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 6-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|----------------|--------------|----------------------|
| 7-Jul-15  |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 8-Jul-15  |       |       | 0.67   | 30.06             |               |                | Rp 23,028.06 | Rp 23,028.06         |
| 9-Jul-15  |       |       | 0      | 30.06             |               |                | Rp 23,028.06 | Rp 23,028.06         |
| 10-Jul-15 |       |       | 1.52   | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 11-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 12-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 13-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 14-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 15-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 16-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 17-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 18-Jul-15 |       |       | 0      | 28.54             |               |                | Rp 21,863.64 | Rp 21,863.64         |
| 19-Jul-15 |       |       | 9.74   | 18.8              |               |                | Rp 14,402.12 | Rp 14,402.12         |
| 20-Jul-15 |       |       | 0.75   | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 21-Jul-15 |       |       | 0      | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 22-Jul-15 |       |       | 0      | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 23-Jul-15 |       |       | 0      | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 24-Jul-15 |       |       | 0      | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 25-Jul-15 |       |       | 0      | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 26-Jul-15 |       |       | 0      | 18.05             |               |                | Rp 13,827.56 | Rp 13,827.56         |
| 27-Jul-15 |       |       | 2.17   | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 28-Jul-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 29-Jul-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 30-Jul-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 31-Jul-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 1-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 2-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 3-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 4-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 5-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 6-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 7-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 8-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 9-Aug-15  |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 10-Aug-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 11-Aug-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 12-Aug-15 |       |       | 0      | 15.88             |               |                | Rp 12,165.19 | Rp 12,165.19         |
| 13-Aug-15 | 14.85 |       | 0      | 15.88             | Rp 131,774.28 |                | Rp 12,165.19 | Rp 143,939.47        |
| 14-Aug-15 |       | 14.85 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Aug-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 19-Aug-15 |       |       | 1.84   | 28.89             |               |                | Rp 22,131.76 | Rp 22,131.76         |
| 20-Aug-15 |       |       | 0      | 28.89             |               |                | Rp 22,131.76 | Rp 22,131.76         |
| 21-Aug-15 |       |       | 0      | 28.89             |               |                | Rp 22,131.76 | Rp 22,131.76         |
| 22-Aug-15 |       |       | 0      | 28.89             |               |                | Rp 22,131.76 | Rp 22,131.76         |
| 23-Aug-15 |       |       | 0      | 28.89             |               |                | Rp 22,131.76 | Rp 22,131.76         |
| 24-Aug-15 |       |       | 9.8    | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 25-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 26-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 27-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 28-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 29-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 30-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 31-Aug-15 |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 1-Sep-15  |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 2-Sep-15  |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 3-Sep-15  |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 4-Sep-15  |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 5-Sep-15  |       |       | 0      | 19.09             |               |                | Rp 14,624.28 | Rp 14,624.28         |
| 6-Sep-15  |       |       | 1.53   | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 7-Sep-15  |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 8-Sep-15  |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 9-Sep-15  |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 10-Sep-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 11-Sep-15 |       |       | 0      | 17.56             |               |                | Rp 13,452.19 | Rp 13,452.19         |
| 12-Sep-15 | 13.18 |       | 0.01   | 17.55             | Rp 131,774.28 |                | Rp 13,444.53 | Rp 145,218.81        |
| 13-Sep-15 |       | 13.18 | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 14-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 15-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 16-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 17-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |
| 18-Sep-15 |       |       | 0      | 30.73             |               |                | Rp 23,541.33 | Rp 23,541.33         |



| Date      | Order | In    | Demand | Inventory On Hand | Order Cost    | Stock out Cost  | Holding Cost | Daily Inventory Cost |
|-----------|-------|-------|--------|-------------------|---------------|-----------------|--------------|----------------------|
| 19-Sep-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 20-Sep-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 21-Sep-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 22-Sep-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 23-Sep-15 |       |       | 8.74   | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 24-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 25-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 26-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 27-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 28-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 29-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 30-Sep-15 |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 1-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 2-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 3-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 4-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 5-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 6-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 7-Oct-15  |       |       | 0      | 21.99             |               |                 | Rp 16,845.88 | Rp 16,845.88         |
| 8-Oct-15  |       |       | 2.27   | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 9-Oct-15  |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 10-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 11-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 12-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 13-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 14-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 15-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 16-Oct-15 |       |       | 0      | 19.72             |               |                 | Rp 15,106.90 | Rp 15,106.90         |
| 17-Oct-15 |       |       | 0.7    | 19.02             |               |                 | Rp 14,570.65 | Rp 14,570.65         |
| 18-Oct-15 |       |       | 1.3    | 17.72             |               |                 | Rp 13,574.76 | Rp 13,574.76         |
| 19-Oct-15 |       |       | 0      | 17.72             |               |                 | Rp 13,574.76 | Rp 13,574.76         |
| 20-Oct-15 |       |       | 0      | 17.72             |               |                 | Rp 13,574.76 | Rp 13,574.76         |
| 21-Oct-15 |       |       | 0      | 17.72             |               |                 | Rp 13,574.76 | Rp 13,574.76         |
| 22-Oct-15 |       |       | 9.23   | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 23-Oct-15 |       |       | 0      | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 24-Oct-15 |       |       | 0      | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 25-Oct-15 |       |       | 0      | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 26-Oct-15 |       |       | 0      | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 27-Oct-15 |       |       | 0      | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 28-Oct-15 |       |       | 0      | 8.49              |               |                 | Rp 6,503.93  | Rp 6,503.93          |
| 29-Oct-15 |       |       | 3.21   | 5.28              |               |                 | Rp 4,044.85  | Rp 4,044.85          |
| 30-Oct-15 |       |       | 0.02   | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 31-Oct-15 |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 1-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 2-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 3-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 4-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 5-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 6-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 7-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 8-Nov-15  |       |       | 19.51  | -14.25            |               | Rp 1,556,301.60 | Rp 4,029.53  | Rp 1,560,331.13      |
| 9-Nov-15  |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 10-Nov-15 |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 11-Nov-15 | 25.47 |       | 0      | 5.26              | Rp 131,774.28 |                 | Rp 4,029.53  | Rp 135,803.81        |
| 12-Nov-15 |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 13-Nov-15 |       |       | 0      | 5.26              |               |                 | Rp 4,029.53  | Rp 4,029.53          |
| 14-Nov-15 |       | 25.47 | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 15-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 16-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 17-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 18-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 19-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 20-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 21-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 22-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 23-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 24-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 25-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 26-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 27-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 28-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 29-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 30-Nov-15 |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |
| 1-Dec-15  |       |       | 0      | 30.73             |               |                 | Rp 23,541.33 | Rp 23,541.33         |



| Date      | Order | In | Demand | Inventory On Hand | Order Cost | Stock out Cost | Holding Cost     | Daily Inventory Cost |
|-----------|-------|----|--------|-------------------|------------|----------------|------------------|----------------------|
| 2-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 3-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 4-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 5-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 6-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 7-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 8-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 9-Dec-15  |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 10-Dec-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 11-Dec-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 12-Dec-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 13-Dec-15 |       |    | 0      | 30.73             |            |                | Rp 23,541.33     | Rp 23,541.33         |
| 14-Dec-15 |       |    | 1.98   | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 15-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 16-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 17-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 18-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 19-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 20-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 21-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 22-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 23-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 24-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 25-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 26-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 27-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 28-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 29-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 30-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
| 31-Dec-15 |       |    | 0      | 28.75             |            |                | Rp 22,024.51     | Rp 22,024.51         |
|           |       |    |        |                   |            |                | Rp 12,480,500.76 |                      |



## APPENDIX G

### PERIODIC REVIEW LEAD TIME

(AC 260 Gr 79 x 109)

#### Generated Lead Time

| No | Random 1   | Random2    | Random 3   | Random 4   | Random 5   | Random 6   | Random 7   |
|----|------------|------------|------------|------------|------------|------------|------------|
| 1  | 0.10517148 | 0.15262994 | 0.00626258 | 0.99523433 | 0.00782884 | 0.26484223 | 0.07897175 |
| 2  | 0.51086144 | 0.30178245 | 0.93665982 | 0.49994566 | 0.99991387 | 0.10780537 | 0.13711997 |
| 3  | 0.55670208 |            | 0.78594805 | 0.5757892  | 0.85433505 | 0.85566924 | 0.02646707 |
| 4  |            |            |            | 0.96015307 | 0.27053973 | 0.05904814 | 0.58219854 |
| 5  |            |            |            |            | 0.27721158 |            |            |

#### Random Value

| No | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 |
|----|---------|---------|---------|---------|---------|---------|---------|
| 1  | 1       | 2       | 1       | 8       | 1       | 2       | 1       |
| 2  | 3       | 2       | 6       | 2       | 8       | 1       | 1       |
| 3  | 3       |         | 3       | 3       | 4       | 4       | 1       |
| 4  |         |         |         | 8       | 2       | 1       | 3       |
| 5  |         |         |         |         | 2       |         |         |



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